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ABSTRACT

This report evaluates the outcomes and cost effectiveness of adult literacy programs in Ugandan villages and compares government programs with those provided by nongovernmental organizations (NGOs). Part 1 describes evaluation objectives, government and NGO literacy programs and the rural socioeconomic context, and evaluation design. About 100 program graduates and control samples were tested and interviewed in each of eight districts. Instructors and village leaders were interviewed, and focus groups were conducted. Part 2 examines learner characteristics, socioeconomic indicators, access to urban areas, participation in literacy programs, attitudes, and experiences in class; literacy centers and availability of materials; instructor characteristics, training, and attitudes; and supervision quality. Parts 3-4 present program outcomes, conclusions, and recommendations. The main conclusions are: (1) since most participants are women, the programs are helping to redress the gender imbalance in educational opportunities; (2) the programs may be missing their primary clients--people with no schooling; (3) decentralization may be undermining incentives and accountability at the local level; (4) most participants had attained levels of reading, writing, and numeracy higher than grade 4, but average attainment was very limited; (5) learner attainments varied with quality of implementation; (6) graduates increased their participation in community governance, improved their health practices, and established successful income-generating activities; (7) similar outcomes were found for government and NGO programs; (8) literacy materials varied in quality and availability; (9) instructors in government programs had little schooling and training, and supervision was dismal in most places; and (10) unit costs were about $4.50 per year (U.S. dollars) but would rise to about $13.00 per year if steps were taken to ensure sustainability. A final chapter by John Oxenham discusses wider implications

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for the adult education profession. (Contains 53 references and 59 data tables.) (SV)

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The photograph was provided by the Functional Adult Literacy Programs in the Ministry of Gender, Labour, and Social Development of the government of Uganda.

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ABBREVIATIONS

AALAE	African Association for Literacy and Adult Education
ABP	Action Aid Buwekula Project
ACDO	Assistant Community Development Officer
ADRA	Adventist Development and Relief Agency
AIDS	Acquired Immune Deficiency Syndrome
AMP	Action Aid Mityana Project
CAP	Community Action Programme
CBO	Community-Based Organization
CDA	Community Development Assistant
CDO	Community Development Officer
DAECS	Department of Adult Education and Communication Studies
FAL	Functional Adult Literacy
FGD	Focus Group Discussion
GRC	Gombolola (Subcounty) REFLECT Committee
HIV	Human Immune-deficiency Virus
IACE	Institute of Adult and Continuing Education
IFAD	International Fund for Agricultural Development
IGA	Income Generating Activity
IIEP	International Institute for Educational Planning
JLC	Junior Leaving Certificate
KALA	Kenyan Adult Learners' Association
LABE	Literacy and Adult Basic Education
LCI,II,III,V	Local Council I (Village), II (Parish), III (Subcounty), V (District)
LRP	Literacy Resource Person
MTEA	Multipurpose Training and Employment Association
NAEA(U)	National Adult Education Association of Uganda
NGO	Nongovernmental Organization
NWASEA	National Women's Association for Social and Education Advancement
ODA	Overseas Development Agency (U.K.)
PAP	Poverty Alleviation Programs
PLA	Participatory Learning and Action
PLE	Primary Leaving Examination
PRA	Participatory Rural Appraisal
PRC	Parish REFLECT Committee
PTA	Parent Teacher Association
PWA	People (person) with AIDS
RC	Resistance Committee
RCU	REFLECT Co-ordination Unit
REFLECT	Regenerated Freirean Literacy through Empowering Community Techniques
SCF	Save the Children Fund
SIDA	Subcounty Integrated Development Association (in Hoima District)
SNV	Netherlands Development Organisation

SOCADIDO	Soroti Catholic Diocese Integrated Development Organization
TBA	Traditional Birth Attendant
UCOBAC	Uganda Community Based Association for Child Welfare
UDHS	Uganda Demographic and Health Survey
ULALA	Uganda Literacy and Adult Learners Association
UPE	Universal Primary Education
UWFCT	Uganda Women Finance and Credit Trust
VRC	Village REFLECT Committee
WAC	Women's Activity Center
WEP	Women's Empowerment Programme

Names of Districts

Ap/AP	Apac
Ar/AR	Arua
Bu/BU	Bushenyi
Ho/HO	Hoima
Ig/IG	Iganga
Mu/MU	Mubende
Ru/RU	Rukungiri
So/SO	Soroti

GLOSSARY

FAL (Functional Adult Literacy) is in this report used to refer to the government literacy programs being implemented in 26 districts and the methodology they use.

Instructor means the teacher in the government adult literacy programs.

Facilitator means the teacher in nongovernment programs, particularly those using REFLECT. (In some instances, where the various programs are discussed together, *instructor* means the adult literacy teachers.)

Graduate means participants who have either passed the proficiency test in the FAL programs or completed a period in the literacy class that the program managers considered sufficient to acquire basic literacy.

Nonliterate refers to those community members who could not read or write, have never attended adult literacy classes, and who participated in the control group.

THE EVALUATION TEAM

Evaluators

The four Ugandan evaluators are all academic staff of the Department of Adult Education and Communication Studies at Makerere University. Anthony Okech, Head of Department; Anne Katahoire and Teresa Kakooza, Senior Lecturers; and Alice Ndidde, Lecturer.

Roy A Carr-Hill is Professor of Education in Developing Countries, Institute of Education, University of London, and Professor of Medical and Social Statistics at the Centre for Health Economics, University of York.

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FOREWORD

I welcome this report as a substantial contribution to filling an unfortunate gap in our knowledge of human learning. In its 1995 paper on strategies for education, the World Bank acknowledged the problem of illiteracy among the poorest people of the poorest countries and the need to provide the kinds of education that would work to reduce their poverty. However, the Bank refrained from recommending measures to ameliorate the situation, partly because the track record of adult basic education programs with literacy was thought to be unsatisfactory and partly because information on the benefits of such programs was lacking. Nonetheless, the Bank undertook to see whether emerging research and evaluation were generating fresh evidence that might require a change of stance. It was at that time supporting adult education and literacy programs in Indonesia, Ghana, and Bangladesh, from which evaluations were awaited.

Since that time, the Bank has sought to widen the sources of potential evidence through fresh initiatives and through further evaluations. With financial support under the Norwegian Education Trust Fund, the World Bank was able to initiate secondary evaluative work with Burkina Faso, Chad, the Gambia and Mozambique in late 1997, and in 1998, to respond positively to a proposal from the Ministry of Gender, Labour and Social Development of the Government of Uganda, for a country-wide evaluation of adult education programs. (In addition to these evaluation activities, this Trust Fund has also financed preparation of adult literacy programs for other countries, supported by the World Bank as part of Bank-financed education projects).

This study would focus on people who had "graduated" from adult basic education classes anywhere between a few months and several years ago. The aim would be to identify the longer-term effects and benefits of such programs. Further, the study would not confine itself to the results of the government's own Functional Adult Literacy Programs, but would include the efforts of nongovernmental bodies like ActionAid, Save the Children, diocesan organizations of the Roman Catholic Church, the Women's Empowerment Programs, the National Women's Association for Social and Education Advancement, the Uganda Literacy and Adult Learners' Association, and others. With these aims—longer-term effects and comparative studies—the evaluation would contribute not only to the improvement of Uganda's own programs, but also to the world's literature, thinking and understanding of the factors that promote, hinder, or are neutral for effective adult learning. It would be especially relevant to the realms of communication skills like reading and writing and of utilizing information to reduce poverty and improve general well being.

Fortunately, the Department of Adult Education and Communication Studies at Makerere University had been involved in earlier partial reviews of these programs, so that local capacity and experience existed to execute the study. Prof. Anthony Okech led the team who won the contract from the Ministry. In addition, the World Bank was able to secure the assistance of Dr. Roy Carr-Hill of the London University Institute of Education, who had a decade previously worked with the International Institute for Education Planning (UNESCO) on its evaluations of the longer-term effects of literacy programs in Kenya and Tanzania.

The final section of the report, which is written by John Oxenham, relates the findings in Uganda to what has become known from adult education in the rest of the world, and considers implications for educators, policy advisers, and makers and financiers. This is not the place to discuss them, but I wish to note briefly the signals that I find of particular importance for policy and practice.

Overall, the report suggests that the track record of an adult basic education program need not be poor—quite the contrary. Particularly interesting is the confirmation that government programs and those delivered by nongovernmental agencies can be equally effective. Particularly important is the confirmation that the manner and quality of implementation do indeed influence the outcomes. A warning against allowing fashion to sway approaches and methods follows from the finding that the graduates of different programs do as well as each other: an eclectic or "cafeteria" strategy to suit varying localities, expectations, and learning styles appears pragmatic.

Equally interesting are the findings that the programs are used mainly by poor women and that unschooled and even elderly adults do seem to learn the skills of reading, writing, and calculating more rapidly than pupils in primary schools. On the other hand, it is helpful to have it confirmed that most adults, who have never been to primary school, do seem to need rather more than a year of regular classes to attain a minimally adequate mastery of those skills (while primary school pupils in Uganda's schools seem to need a good deal more than four years of schooling to do the same). Also helpful is the reminder that learning abilities vary widely among adults, just as they do among children. Quick fixes are ruled out.

From the view of continuous lifelong learning, the striking fact that three out of four of the learners sampled had already been to primary school and were using an adult basic education program to improve their skills and knowledge seems to attest to the existence of a large unsatisfied demand for more education.

The adult education profession and the World Bank have cause to be grateful to Anthony Okech and his team for this contribution to our knowledge and understanding of the effects of programs of adult basic education; to Roy Carr-Hill for condensing the original report into a form more accessible to policy advisers; and to John Oxenham for final editorial work and for the chapter that relates the findings to international issues regarding adult basic education. Finally, I want to thank Jon Lauglo for the effort he has led over the last couple of years to help make support for adult literacy an integral part of the World Bank's education sector assistance program in the Africa Region of the Bank.

Birger J. Fredriksen
Director
Human Development, Africa Region
The World Bank

PREFACE

The government of Uganda has the conviction that illiteracy and inadequate basic education deprive the people of the opportunity to realize their potential and effectively participate in decisionmaking and other development activities. Government is therefore committed to providing nonformal education with specific reference to adult literacy with the following objectives:

- Attainment of permanent and functional literacy and numeracy
- Acquisition of functional skills relevant to life in the community
- Development of national awareness of individuals
- Promotion of lifelong learning in the community.

In order to achieve these objectives, the government in 1992 started with a pilot project in eight districts using the functional literacy approach. The aim of the pilot phase was to generate lessons that would be used in the process of expansion. Several reviews carried out have indicated that the functional literacy approach has taken root and has yielded impressive results. For instance, adult learners from functional adult literacy classes are using their literacy and numeracy skills to improve on income-generating activities. The Functional Adult Literacy Programme has become one of the major tools for modernization of agriculture and poverty eradication.

Due to benefits accrued from the programs, there has been demand from all parts of the country. Government will therefore promote partnership with international agencies, nongovernmental organizations, and community-based organizations to meet the ever-increasing demand.

I wish to extend gratitude to UNICEF and the German Adult Education Association (DVV) for the continued support that has helped us to accomplish the important phases. I would also like in a special way to extend appreciation to the World Bank for support and for arranging finance from the government of Norway for the Functional Adult Literacy Evaluation in Uganda. It is through such concerted effort that the problem of illiteracy will be overcome.

I call upon all those who will use this report to put it to the best use possible to improve on implementation of Functional Adult Literacy programs.

Hon. Janat B. Mukwaya
Minister of Gender, Labour and Social Development

ACKNOWLEDGMENTS

We thank the Ministry of Gender, Labour and Social Development for giving us this opportunity to play a key role in the evaluation of the Functional Adult Literacy (FAL) programs in Uganda. We thank equally the World Bank, which worked with the Ministry to commission the evaluation, and the Government of Norway for financing the evaluation.

This evaluation owes much to many organizations and individuals. We mention a few of them here but are unable to list all by name. We beg the understanding of those who are not mentioned. We are certainly very grateful to them all.

The Permanent Secretary of the Ministry, Mr. Martin Odwedo, the FAL Coordinator, Mr. Herbert Baryayebwa, and the contact officer in the World Bank office, Ms. Harriet Nannyonjo, are mentioned especially for their efficient handling of the formalities and providing background information and documents. The generous support of the district and local officials in the eight districts where the evaluation was carried out, both civil servants and political leaders, created the enabling environment and provided the information we required at their level.

The CDOs and ACDOs in charge of literacy played a crucial role by working closely with us during the evaluation field work. The managers of the NGO programs, which were included in the evaluation: REFLECT, WEP, SCF, and NWASEA, were welcoming, open, and supportive. So were the other organizations we interacted with: ADRA, IACE, LABE, and SOCADIDO.

The great eagerness of the instructors, programs participants and graduates to assist the evaluation, and their willingness to answer all the questions, ensured a very successful collection of the data required.

We were supported by a committed, conscientious team of research assistants, who made it possible to obtain and record adequate, high-quality data. Their names are listed below for recognition. We were supported also by a dedicated team of secretaries and other support staff both in Uganda and in England whose inputs were indispensable at various stages of the exercise.

May this evaluation bear rich fruit for adult literacy and basic education to reward the contribution of all who assisted its implementation.

Anthony Okech (Team Leader)
Anne R. Katahoire (Evaluator)
Teresa Kakooza (Evaluator)
Alice N. Ndidde (Evaluator)
Roy A. Carr-Hill (Evaluator – International Consultant)

EXECUTIVE SUMMARY

Purpose of the Study

This evaluation was commissioned by the Ministry of Gender, Labour and Social Development of the government of Uganda. Its purpose was to:

- Compare and contrast the resource requirements and the effectiveness of the Functional Adult Literacy (FAL) programs and Regenerated Freirean Literacy through Empowering Community Techniques (REFLECT)
- Assess the implementation of adult literacy education
- Recommend future policy on the development of adult literacy education.

The specific tasks, detailed in Chapter 1, include:

- Analyses of effectiveness in terms of both the attainment and retention of reading, writing, and arithmetic skills and facilitating practical knowledge, attitude change, and skills (and, in particular, knowledge about prevention of HIV infection and care of persons with AIDS)
- Analysis of the factors affecting performance in each of these
- The costs of activities, the quality of the materials, the extent of local commitment, and the adequacy of monitoring and supervision
- Appropriate recommendations to the government.

These tasks required that the evaluation specifically emphasize outcomes and cost-effectiveness rather than process or methodology.

The context of literacy programs in Uganda and the current state of both government and NGO programs are described in Chapter 2, with the conclusion that the provision of adult literacy programs in Uganda still falls far short of the need and demand.

Study Design and Implementation

Our approach to the evaluation—described in Chapter 3—is based on the view that the implementation of adult literacy programs can be understood only in the community context in which they take place. Accordingly, the research design includes both quantitative assessments of individual performances and qualitative evidence about the communities. In order to include a representative range of situations, the evaluation was carried out in 19 subcounties of eight districts (Apac, Arua, Bushenyi, Hoima, Iganga, Mubende, Rukungiri, and Soroti) in six of the country's eight regions, all chosen after discussion, both centrally and locally. Within the subcounties, random samples of graduates were drawn on an individual basis—rather than by literacy group[1]—from lists supplied by the subcounty authorities. A total sample of 793 graduates was selected for testing and interviews.

[1] A consequence of this approach was that graduates could not be readily matched with their groups or instructors. Further, because of the voluntary status of the FAL instructors and the lapse of time, it was not possible to trace and systematically interview those instructors who had taught the graduates in this sample when they were learning.

The following instruments, which are the basis of our findings, were developed and used:

- Interview survey instrument for 100 graduates and a control sample of 20 nonliterates in each district. The interview schedule included a series of items to assess their level of functional knowledge, attitudes, and practices.
- A ***written*** test of comprehension, numeracy, and writing skills for the graduates and a control group of primary school pupils from Grades 3 and 4
- Interview schedule for the instructors and facilitators with many open-ended questions, as well as protocols for semistructured interviews with village leaders and for focus group discussions with both learners and instructors.[2]

The findings about the learners' circumstances—their socioeconomic background and the literacy environment available to them—and their experience of the literacy classes and how these vary between locations are described in the first two parts of Chapter 4. What stands out is the fact that nearly three-quarters of the sampled literacy graduates (both men and women)—and over a third of the nonliterates!—say that they have had some primary schooling. A substantial minority reported having been at primary school for five or more years.

The conditions at the centers, the literacy materials available, the circumstances of the instructors and the facilitators, and the quality of monitoring and supervision are documented in Chapter 5. Highlights are the widespread frustration among the instructors at the lack of incentives and the erratic nature of the supervision. Moreover, the majority of the instructors have had less than a full secondary schooling (48 percent had only reached S2—second year of secondary schooling) and had received minimal training for their role as instructors.

Program Outcomes

The main findings on effectiveness are presented in Chapter 6. The tests revealed that nearly everyone in the sample was able to read and understand the nine very simple questions about their name, today's date, who is the president, etc. However, the average score for the nine rather simple numeracy items was just over 70 percent, and the average score with six more complicated comprehension questions, where the learner is asked to read and understand a question contained in a sentence or a short passage, was just over 60 percent. Their scores for four relatively simple writing tasks were worse still, with a mean score of just under 40 percent.

These graduates performed better on the test than Primary 3 and 4 pupils. This was true also of those adults who had little or no schooling, and of those who were in the oldest age group. As for the comparison between the graduates of FAL and those of REFLECT, after previous schooling was controlled for, little difference appeared.

On the issue of the retention of literacy and numeracy skills, a valid assessment was not possible, as the majority of the sample had continued attending classes after taking the final test. In effect, they had of their own accord ensured the maintenance of their skills.

As regards the items on functional knowledge, attitudes, and practices, the overall performance appeared to be better when compared to the knowledge, attitudes, and practices of the control

[2] Details of the study design, together with a brief report on the fieldwork, are included in the technical volume (Okech et al. 1999).

group of nonliterates. However, we are conscious that adults will have been exposed extensively to discussion of many of these topics in the media and in both formal and informal meetings.

For purposes of further analyses, index scores have been constructed. The average scores were 7.3 correct out of 13 knowledge items (56 percent), an average 13.1 "modern" attitudes being expressed out of 18 items (72 percent), and an average 8.5 modern practices being reported out of 19 items (44.7 percent). Although performances on the different sections of the test and on the different functional scales are related, the associations are not strong (typically a correlation of 0.3, indicating 10 percent common variance), so that it is not possible to speak of a generalized attainment of adult literacy and numeracy. Therefore, the analysis has continued to use the scores separately.

The variance in scores is wide, but only three variables appear influential in explaining it. The most powerful is location, i.e., subcounty. The second is the grade reached in primary school, while the third, rather weaker, is socioeconomic background. There were only isolated examples of statistically significant associations between the scores and the age, sex, household circumstances, or literacy environment of the learners. Length of exposure to literacy classes makes no difference to the knowledge score and not much to the attitude score, but a significant difference to the practice score.

The relative performance of learners attending the FAL programs, Action Aid's REFLECT, and other NGO programs included in the sample have been analyzed. However, because of the geographic distribution of programs, it was possible to make a comparison only between FAL and REFLECT, both operating in Apac and Mubende. On overall average, participants in REFLECT perform considerably better than those in the FAL programs. However, when controls are in place for years of primary schooling, participants in the FAL programs with no or only very limited schooling perform better, while those with three or more years of primary schooling perform better with the REFLECT programs.

Clearly, it is important to be able to explain the large differences between the performance of the participants in the different districts and subcounties. Here we have drawn on our examination of the primers used in different districts, the field experiences, the material that we have collected both through the semistructured interviews with the leaders and the focus group discussions, and the interviews with the instructors and facilitators. Taken together, these suggest that the variations in performance are, at least in part, associated with the cultural attitudes toward education and learning in the district that influence the motivation of individual learners—especially women. More important, they also seem to influence the extent to which the program is supported locally at the village level and the commitment of the district and subcounties to the program, as expressed through both the budget and efforts put into monitoring and supervision.

Of course, the performances on these tests are by no means the only outcomes of interest and, in the third part of Chapter 7, we present our findings on the income-generating activities in which the participants have been involved; the extent to which they have been able to use their reading, writing, and calculating skills; and any other uses to which they have put their literacy skills and, more generally, the benefits that they feel literacy has brought them. About 80 percent of the respondents reported doing some reading, and similar proportions claimed to practice at least occasionally writing and mental and written calculation.

In terms of the perceived benefits of literacy, it is important to emphasize that the majority in all districts were content with reading, writing, and arithmetic in general. Other advantages/benefits given ranged from those that were meeting practical needs of learners (like improved family

health, food security, increases in family income, ability to pay children's school fees) to those that were attempting to meet their strategic needs. These were found to include decisionmaking not only at the family level but at the community level as well—for example, the ability to participate in civic activities in their communities, attending local council meetings, and taking part in voting activities. Further benefits cited were increased self-confidence, self-esteem, and the capacity to avoid being cheated and manipulated.

Nearly everyone—both graduates and nonliterates—reported sending their children (both boys and girls) to school, and there did not appear to be any discrimination between the sexes. However, there was one distinct difference between the graduates and the nonliterates that could not be attributed to the level of prior primary schooling: the graduates spend more time discussing education and school matters with their boys and girls and more time looking at their homework.

In terms of their aspirations about what to learn next, nearly half want to learn English. Other responses, each by only small proportions, were vocational and business skills, advanced reading and writing, and modern agricultural practices.

An impressive number of income-generating projects had been started in the classes. Many of the respondents also testified to having started income-generating projects of their own as a result of their participation in the programs. However, the sustainability of both the class and individual projects is doubtful in some areas, either because there is no market or because crucial infrastructure (e.g., storage) is lacking.

Costs and Cost-Effectiveness

The material that we have collected on costs and resources used both nationally and in the eight districts and for the various programs is summarized in Chapter 8 and detailed in the Okech et al. 1999. The first observation is that, given the nature of the FAL programs, where most learners remain in the programs after the final test, it does not make much sense to compute a unit program cost. Most estimates have therefore been computed on an annual basis, although we also note that the intention of the FAL cycle is to complete within a year, so that these estimates could be taken also as estimates of the unit program cost. Secondly, it is very difficult to obtain precise cost figures, partly because of the relative recency of the decentralization process and its affected budgetary responsibilities and actual expenditures.

Nevertheless, we are able to make reasonable approximate estimates for most components of the costs for most programs (although, in a few cases, these are not much better than informed guesses). On average, while the FAL programs, which rely on unpaid volunteer instructors, cost about US$4 per participant on an annual basis, the costs of the REFLECT programs, which pay their facilitators a regular stipend and offer more intensive training and support, are calculated to be US$9.

Conclusions and Recommendations

In Chapter 9, we draw together the conclusions and recommendations of the evaluation. Quantitatively, the overall picture of the FAL programs is that they continue to expand at a very low unit cost but that, because they rely almost entirely on volunteer labor, they are in danger of losing momentum. The danger to the programs is increased by the fact that the financial input by

the central government has decreased in relative terms, from 50 percent to 30 percent, against donor funding over the past few years. A summary of the main conclusions follows.

Conclusions

The programs are helping the government in its aim of *redressing the imbalance of educational opportunities between men and women*. The overwhelming majority of participants are women, and the curricula address many issues relevant more to women than to men. The participation of such high proportions of women makes a strong case for the programs' potential for bringing about socioeconomic transformation.

Second, the programs seem to be *in danger of missing their primary clients*, who are the people who have had no schooling. Almost three-quarters of the graduates sampled have been to school, many for more than five years. The fact that they still felt themselves inadequately literate and numerate may reflect poorly on the primary schools of the country, but their presence in literacy classes may be discouraging true nonliterates from enrolling.

Third, *the government's policy of decentralization may be militating against the priority it has attached to universal literacy*. By delegating to local authorities the task of financing literacy programs without sufficient incentives and accountability, the government may be undermining the programs. It will need to negotiate a balance between promoting decentralization and ensuring the maintenance of its priorities.

The majority of the participants in the literacy programs evaluated, regardless of their schooling and age, had attained a level of reading, writing, and numeracy higher than that of Primary 4 pupils. However, the average level of attainment is very limited. Moreover, the very wide range of quality of materials and supervision, which appears to be reflected in the variation in attainments between the districts, makes it difficult to discuss a national program. The designers of the programs appear to have unrealistic expectations about what the average adult learner can master in a given period of time and make little allowance for the large variations of learning abilities in adult groups. They also appear to be out of touch with what poor, rural adults know, feel, and do already. While the NGO programs are more tightly organized, they are also operating in circumscribed areas, which are much easier to handle; and it is not clear that the attainment of the participants in those programs is substantially better.

The quality of implementation is the major explanation of the variations in the learners' attainments. To be effective, literacy programs need to be assured of sufficient levels of support and efficiency.

Graduates perform considerably better than nonliterates in the same communities in respect of their functional knowledge, attitudes, and practices. However, the mean scores for practice were relatively low compared with those for knowledge and attitudes. The problem may simply be that participants cannot put their newfound knowledge into practice, perhaps because of peer pressure, and more simply, because of their lack of resources.

An impressive number of income-generating projects have been started in the classes, and many individuals attribute their initiative to their participation in the programs. The findings suggest that the literacy programs benefited the learners with practical knowledge, especially in the areas of agriculture—crops and animal husbandry—and handicrafts.

Other benefits mentioned by the sampled graduates included:

- Stronger participation in the governance of their communities in terms of frequency and in the significance of roles played
- Adoption of better health practices, especially through better personal and environmental sanitation
- Establishing successful income-generating activities.

On the whole, the majority of learners seemed satisfied with the benefits they had reaped as a result of participating in the programs. However, the *activities in which the learners and graduates are engaged are still at the bare subsistence level*, although in some cases they may be more productive than before. These are hardly the kind of activities that will enable many of them to break out of poverty.

Participants in the REFLECT circles perform no better than participants in the FAL classes on either the test or the functional scales, after controlling for the level of prior primary schooling, even though the REFLECT facilitators are better qualified, better trained, better paid, and better supported.

The literacy materials, in particular the primers, are of variable quality, and their distribution is not as equitable as it ought to be. There is also a general lack of relevant reading materials in the local languages, making it difficult for the program participants and graduates to have access to reading materials.

Many graduates would like to move on beyond their basic literacy competencies in the local language. This raises the issue of the availability and then affordability of post-literacy materials in the local languages. At the same time, there are a significant number who would like to learn English.

Instructors have relatively little schooling and receive only minimal training. When this is added to their complaints about the lack of incentives, the possibility that the programs will collapse in some areas must be taken seriously.

The monitoring and supervision situation is dismal in most places, especially in the government programs. In many cases, this can be explained by lack of resources. However, the lack of a properly worked-out system and insufficient interest in the programs by some of the district and local authorities do not help.

Although there are difficulties pinning down the exact costs, we estimate that the unit costs of participation are about US$4.50 per year. If a reasonable amount is added on to ensure sustainability of the programs (and in particular the commitment of the instructors), the estimated amount would be US$13 a year.

Our main recommendations are as follows:

Consistency in policy: the Ministry of Gender, Labour and Social Development should ensure the firm reconciliation of the policy of decentralization with the priority for universal literacy. Because of the widespread and great need for adult literacy programs, the government must continue to be directly involved in providing them.

The ministry should enable and strengthen its Functional Adult Literacy Co-ordinating Unit to promote and support quality in all adult literacy programs.

In view of the demand, the ministry should initiate a national discussion on a national system of adult lifelong education that will attract the truly nonliterate and also satisfy those who need to take their education further, and may require formal equivalence with school credentials.

In view of the need and demand, the ministry should seek ways to enable the growing NGO sector to contribute even more to literacy education and lifelong learning.

The ministry should also explore how it can assist other ministries and agencies to use literacy education to further their own purposes and goals.

While the broad strategy of the programs as recommended in the 1996 Plan, revised in 1998, should be endorsed, there has to be clarity over what a functional adult literacy program can be expected to achieve, and what other kinds of provision should be made available. Some programs seem to indicate that judicious adaptations of current approaches and methods can produce interesting results.

Experimentation with such adaptations should be encouraged further, particularly in regard to ascertaining what adult learners already know, feel, and do.

The mixed arrangements for recruiting, training, and rewarding literacy instructors are not healthy for the continuation and expansion of the national program. In view of the desirability of a comprehensive system of adult lifelong education, the Ministry of Gender, Labour and Social Development should initiate discussions on the options for a framework of shared responsibility for a national pool of adult educators.

The quality of the learning materials currently available widely varies. The Functional Adult Literacy Co-ordinating Unit should investigate how best to enhance the materials in line with what people already know.

Reading materials in Uganda's indigenous languages are scarce, so that literacy graduates have access to little on which to develop their skills further. The Ministry of Gender, Labour and Social Development should lead and promote efforts to multiply the literature available.

Learners do not appear to associate literacy with the occupations they follow. Primers and follow-on readers should continue to emphasize information on upgrading common rural occupations, so that the link between literacy, continuing education, and the ability to raise productivity is clearer to the learners.

As regards implementation and management, the interesting results of learners' involvement in various aspects of program management point the way for further learner involvement in the programs. The FAL programs should, accordingly, explore various ways of learner involvement, including collaboration with organizations like the Uganda Literacy and Adult Learners' Association (ULALA) and Literacy and Adult Basic Education (LABE).

The final chapter relates the findings in Uganda to what is known from other programs around the world.

PART I: STUDY BACKGROUND AND METHODOLOGY

CHAPTER 1: BACKGROUND AND GENERAL PRESENTATION OF THE STUDY

The present evaluation was commissioned by the Ministry of Gender, Labour and Social Development of the government of Uganda. While learners participating in the government's Functional Adult Literacy (FAL) programs had been tested several times since the programs began in 1992, and there had been a few partial reviews (Okech 1994, Cottingham et al. 1995), the effects of adult literacy—as in many other countries—had not been studied systematically. In particular, the large-scale Process Review, carried out in 1995, specifically excluded any consideration of outcomes, principally because the programs to that date had not been implemented for a sufficiently long period. In contrast, the outcomes—together with a consideration of cost-effectiveness—are the main focus of this study.

Research and Evaluation Background

Over the last few decades, a large number of countries have embarked upon the organization of nationwide literacy programs. Although the rationale behind these programs varies from country to country, the presumption is that efforts to increase the literacy levels of adults will have positive consequences for the learners, for their community, and eventually for the nation as a whole.

However, the empirical evidence to support such an expectation is weak both in Uganda and in other countries. Indeed, adult literacy is, in general, a neglected area in terms of data collection and research. (See, for example, Brown 1990, Cawthera 1997, Moulton 1997.) In many countries, it may even be difficult to find precise information about apparently basic facts such as the number of adults enrolled in literacy classes, the number of instructors on which to base an estimate of program costs, or the number of literacy proficiency certificates that have been delivered—all of which could be the basis of a crude estimate of effectiveness.

Furthermore, for many countries the illiteracy rate, which is an essential indicator for any plan of action in the field of literacy, is only a crude measure based on self-reporting by household heads and questionable assumptions about the equivalence between a given number of years of primary school attendance and a sufficient proficiency level in reading and writing. Although some governments do now use literacy tests to assess, by direct measurement, the literacy levels of their population in censuses or representative surveys,[1] the cost of such exercises still renders

[1] For example, in Kenya, the Central Bureau of Statistics organized in 1980–81 a rural literacy survey on the basis of a representative sample of rural households using objective tests in either the mother tongue, Kiswahili, or English, to assess the literacy levels of the population of age 12 and above (Republic of Kenya, Central Bureau of Statistics 1982).

them relatively rare. The consequence is that, in many countries—and in Uganda—in calculating the illiteracy rates, all primary school leavers are presumed to be literate. As this report will show, such a presumption is unsafe. Therefore, even in Uganda, the literacy rate of 60 percent reported for 1991 has to be considered with caution.

The situation is even less certain in terms of the effects of a literacy program. There are several studies that demonstrate the positive effects of a given number of years of primary schooling on farmers' productivity (e.g., Jamison and Lau 1982), and several macroquantitative analyses about the relationships between literacy rates and indicators of economic development and social well-being, such as health, nutrition, employment, or family size, etc. (see, for example, Psacharopoulos and Woodhall 1985, Eisemon 1985), but there are doubts over the adequacy of the data to sustain such inferences (e.g., Murray 1987, Carr-Hill 1990).

The major gap in our knowledge is the absence of studies of how (adult) literacy programs work and what results they produce. What are the teaching and learning conditions in literacy centers? What do adults really learn in those centers, and to what extent do they become proficient in reading, writing, and calculating? How long does it take them to reach a given level of proficiency? Do they really apply what they have learned in daily life? To what extent and under which conditions do they relapse into illiteracy? What are the individual and social benefits of adult literacy?

These questions—and many others related to the functioning and effects of literacy programs—have not received much attention from the research community so far. Hence, discussions about literacy tend to be largely dominated by normative statements, while policymakers and planners do not have an extensive empirical basis on which to develop efficient strategies for maximizing the benefits of the programs they promote.

Given the timing and time scale of this evaluation, we could not carry out either longitudinal studies with baseline data, and experimental and control groups, or full-scale ethnographic case studies. However, we have tried not to neglect the contribution that qualitative approaches can make to quantitative foundations, and have therefore incorporated as much of learners' and instructors' own voices as was possible through a series of interviews at both district and subcounty levels and through focus group discussions with literacy graduates, instructors, and village leaders (see Chapter 2).

Objectives

In its efforts to further expand the programs, the government of Uganda had been looking for avenues of cooperation with various organizations. A mission from the World Bank at the end of 1998 recommended a comprehensive evaluation of the government's own FAL programs, as well as the adult literacy programs implemented by a number of NGOs. With support from the Norwegian Trust Fund for Education in Africa managed by the World Bank, the Ministry of Gender, Labour and Social Development, in April 1999, awarded the contract for the evaluation to the Department of Adult Education and Communication Studies of Makerere University.

The broad objectives of the evaluation were to:

- Compare and contrast the resource requirements and the effectiveness of both the FAL programs and REFLECT (Regenerated Freirean Literacy through Empowering Community Techniques)

- Assess the implementation of adult literacy education
- Recommend future policy on the development of adult literacy education.

Structure of the Report

A considerable amount of material has been collected through documentary reviews, semistructured interviews, focus group discussions, and quantitative interview surveys, as well as through tests of abilities in reading, writing, and calculating. Although a main finding is the difference between localities—indeed, the material collected in each district and subcounty is interesting in its own right—this report aims to achieve a view that is both national and more than superficial through synthesizing the data from the qualitative and quantitative studies in the eight districts.

The report itself is divided into four parts and is supported by a substantially more detailed technical volume (Okech et al. 1999). Chapters 1, 2, and 3 present the background and methodology of this study. Chapter 2 provides some background material on the national context and literacy programs in Uganda, and Chapter 3 briefly describes the design and implementation of the research (see Chapter. 3 in Okech et al. 1999, for further details). The second part, Chapters 4 and 5, presents the literacy programs in terms of the characteristics of their learners and instructors, the situation of the literacy centers, and the experiences of both learners and instructors in the literacy programs. The material in this section provides some explanation for the outcomes presented in the next section. It is also useful for a comparative analysis of the literacy programs and their instructors in the eight districts.

The third part, Chapters 6, 7, and 8, presents the effectiveness and effects of the literacy programs. Chapter 6 focuses on effectiveness. In its first section, it examines the scores on the literacy and numeracy tests administered contemporaneously with the interview. In the second section, it analyses the learners' replies to the questions about functional knowledge, attitudes, and practices. Chapter 7, drawing on both the group discussions with the nonliterates and the graduates of the programs, and on their replies to individual questions, discusses how the learners have used their newly acquired skills and what they see as the benefits of literacy. Chapter 8 focuses on cost-effectiveness. We have summarized all the material obtained about the costs of the programs (for fuller details, see both Chapter 8 and Annex 8 in Okech et al. 1999) and made estimates both of the relative costs of different programs and of cost-effectiveness when compared to primary schooling.

In the fourth part, Chapter 9 presents a summary of the conclusions and makes recommendations for the FAL programs, while in a fifth part, Chapter 10 relates the findings to evaluations from other parts of the world.

CHAPTER 2: THE CONTEXT OF LITERACY IN UGANDA

The purpose of this chapter is to describe the antecedents and current context of the adult literacy programs operating in Uganda. Currently 38 percent of the total population is officially classified as illiterate, with a substantial imbalance between women and men—between 53 percent of the women and 27 percent of the men (Vision 2025). As mentioned in passing in Chapter 1, this may well be an underestimate. The chapter begins with a short history of adult literacy programs in the country and ends with a brief sketch of the socioeconomic conditions that currently prevail and that literacy and other education programs should help ameliorate. Underlying it is the assumption that, while educational programs can stimulate and support beneficial multiplier effects, their benefits can be frustrated by unfavorable conditions such as poverty, the lack of capital and infrastructure, restrictive policies and laws, political instability and civil strife, economic decline, and natural disasters.

Government Literacy Programs

Historical Background

Literacy was first introduced to Uganda during the late 19th century by religious missionaries, both Islamic and Christian. For many years it was only the missionaries who provided the literacy training and, to a great extent, any other type of organized education.

The colonial government joined in gradually, but only when it felt obliged to keep demobilized indigenous soldiers usefully occupied after the Second World War did it establish the Department of Public Welfare to organize systematic programs. This was the forerunner of the Department of Community Development, which is currently in charge of adult education. After independence from the colonial power in 1962, the government of Uganda joined other African governments in promoting the acquisition of literacy by all their populations for the purpose of enhancing socioeconomic development.

In 1964 the government launched the national mass literacy campaign using the traditional general approach to teaching reading, writing, and simple numerical skills independently of function or context. The campaign was in 22 languages, with a primer and follow-up reader in each. Two years later, in 1966, under the influence of UNESCO, the notion of functional literacy was introduced but it did not have much impact, partly because grafting it on the traditional materials already in use was difficult.

The campaign soon lost its initial steam but continued operating. When Idi Amin took power in 1971, he gave it a temporary boost. However, by the time Amin's government was overthrown in 1979, there was very little government provision of literacy programs, a situation that continued until the early 1990s.

This first campaign has never been systematically evaluated, but the informal consensus seems to be that:

- A number of individuals did acquire a rudimentary ability to read and write their names and understand some simple statements. This must have contributed something to the reduction of illiteracy during the 1960s and 1970s.
- The campaign was poorly designed, without a systematic curriculum or implementation plan, so that the materials, prepared in a rather ad hoc manner, could only accidentally respond to the needs of the learners.
- The campaign also suffered from the use of untrained and uncommitted adult literacy teachers and sometimes school children.

During the late 1980s, after civil order had in the main been restored, UNESCO helped set up a structure at both national and district levels, and a series of training workshops in preparation for a needs assessment for functional adult literacy were held. But the government did not include adult literacy programs in the priority list of its plans until the 1991–92 financial year, when the plan of action for the eradication of illiteracy, first drawn up during 1980s, was developed into a project proposal presented to UNESCO.

Currently the Department of Community Development, which is responsible for the day-to-day running of government adult literacy programs all over the country, has only limited staffing at the center but potentially a good staffing infrastructure right down to the subcounty level, where it posts Community Development Assistants (CDAs). In terms of gender balance, staffing is predominantly male at the higher levels. At the field level, where most learners are women, there is a good balance between male and female staff.

Integrated Nonformal Basic Education Pilot Project (INFOBEPP)

In 1992, with assistance from UNESCO, UNICEF, and the German Adult Education Association (DVV), the Department of Community Development launched a pilot project entitled Integrated Nonformal Basic Education (INFOBEPP). This effort covered parts of eight districts, one in each of the eight regions of the country. The four languages used in the pilot project together serve as mother tongue or first language to at least 55 percent of the population—and in reality probably more (Ladefoged et al. 1971).

The approach emphasized the functional aspects of literacy and was designed to:

- Help people to understand and be aware of the true nature and reasons for their situation and problems and how their conditions can be improved
- Enable people to acquire practical knowledge and skills and the proper attitudes to use these to improve their living conditions (National Plan for Functional Literacy, May 1996).

To achieve this twofold task the methodology selected was described as "integrated" in that knowledge from different subjects was brought to bear upon a problem, and different professionals or sectoral workers in the field were to be invited to address the learning or development issue at hand. The approach was intended to keep learning and life together by tying the learning to what the learners were already doing, helping them to do those better, and then enabling them to start on new activities (National Plan for Functional Literacy, May 1996)).

Process Review of the pilot project, carried out by an international team in October 1995, concluded that there was overwhelming enthusiasm for the programs at all levels both within and outside the pilot project areas, and that there was evidence of positive impact on women's self-esteem and confidence and on their domestic hygiene, agriculture, and diet. The Process Review

team recommended expansion of the functional literacy programs with a decentralized management structure complementing the national policy for decentralization. They pointed to the importance of a system of incentives for instructors and of clear definitions of the roles and financial responsibilities of the center and the districts, and suggested that a large-scale credit scheme should be put in place and actively linked to the literacy programs.

Expansion of the Programs into FAL

The encouraging evidence about the effects of adult literacy on children's schooling, democratization, and empowerment was reinforced by two reports: one showing that women in 29 out of the 39 districts of Uganda identified illiteracy as their highest ranking problem (UNICEF 1994) and the other a World Bank report documenting that adult literacy on its own explains 46 percent of the variation in the district poverty index (Uganda, January 1996). This combined evidence of need, demand, and benefit moved the government in 1996 to expand the program and rename it the National Functional Adult Literacy program.

The current programs aimed to reduce illiteracy rapidly from the current 38 percent to below 10 percent in 10 years. In numbers, that would require enabling a total of some 4 million adults to learn how to read and write, an average of 400,000 per year. Starting from 1996, there has been a gradual expansion from the 8 districts of the pilot project to 26 by the end of 1998 (of the 45 in the country), although typically so far, the programs operate only in small parts of a district. The total enrollment for 1999, three years into the programs, is 140,000 learners.

NGO Literacy Programs

Following the early religious missionaries, several NGOs work in Uganda. The most significant, with coverage beyond just a few villages, are described briefly below.

Action Aid

The best known internationally and the most influential has been Action Aid, which developed a new approach to education with literacy called REFLECT in 1993 that was tried out in Bangladesh, El Salvador, and Uganda. The REFLECT approach seeks to build on the theoretical framework developed by the Brazilian Paulo Freire, but provides a practical methodology by drawing on Participatory Rural Appraisal (PRA) techniques. An important characteristic is that in REFLECT there are no textbook, no literacy "primer," no preprinted materials other than a guide for facilitators that is produced locally, preferably with the input of the facilitators themselves. In Uganda, the REFLECT pilot project was carried out in Bundibugyo.

After evaluating the pilot phase, Action Aid set up a REFLECT Coordination Unit (RCU) in Mubende, Uganda, to train and advise those intending to use REFLECT throughout Africa. REFLECT was introduced into the literacy programs operated by Action Aid in the Mubende district. Other adult literacy programs using REFLECT were started in four other districts; total enrollment is estimated at about 10,000. The RCU had also provided training in REFLECT for personnel of other programs in Uganda. These other programs have, in practically all cases, decided to use a merger of REFLECT and primer-based approaches. Some of the organizations that have benefited from such training are:

- The government FAL programs personnel in Soroti, Atiira subcounty
- Soroti Catholic Diocese Integrated Development Organisation
- Women's Empowerment Programme in West Nile (Arua, Moyo, Adjumani, and Nebbi)
- Save the Children Fund, Arua.

Women's Empowerment Programme (WEP)

The West Nile region, the home of Idi Amin, was one of the areas of Uganda that suffered most following the overthrow of the dictator. When the very high rates of illiteracy among women were realized (71 percent as compared to 35 percent for the men), the Netherlands government supported a series of activities to develop a Women's Empowerment Programme (WEP) with a strong component of literacy and other education. WEP contacted Literacy and Adult Basic Education (LABE), a Ugandan literacy resource organization, for training in developing the literacy component. LABE proposed a methodology that freely adapts from various approaches, a choice it describes as "the supermarket approach." The trained community workers of WEP dialogue with the women in a group of villages, leading to the establishment of a Women's Activity Center (WAC) and the choice of a potential literacy facilitator who is then trained by WEP. No primer is developed but some reading materials are acquired from local language committees, while the learners and facilitators themselves produce others.

Although preparations for literacy work started at the end of 1994, the actual literacy learning activities did not start until 1998. So by the time of this evaluation, the oldest literacy classes had operated for barely one year. Total enrollment, mostly in and around Arua municipality and in the Moyo and Nebbi districts, is estimated at 6,000.

SCF Female Adult Literacy Project in Arua

Save the Children Fund (SCF), a U.K.–based agency, has worked in Uganda since the 1950s, with a break during the Amin era. The SCF Female Adult Literacy project started in October 1997. As in the case of WEP, preparations for the project were started with exposure to REFLECT, but since then SCF has worked closely with LABE.

The SCF facilitators began without any manual to guide the learning process. There was no set curriculum, and the literacy participants collectively determined the topics to be discussed. As such they have produced simple reading booklets. A facilitators' session guide was later developed using information from topics covered in different circles and was also in the process of being prepared for publication for use in the literacy project. Total enrollment is about 400.

SOCADIDO Adult Literacy Programs

The Soroti Catholic Diocese Integrated Development Organisation (SOCADIDO) is an organization involved in various types of development work in three districts. Its work is based on the church parishes.

Adult Literacy is one of the more recent projects of SOCADIDO, starting in 1995 with seven classes that were introduced into existing women's groups. The women themselves, together with the SOCADIDO adult literacy promoters, selected their instructors, who initially used simple

school books, but later, after exposure to REFLECT and LABE materials, developed their own in class.

The selected instructors were trained by SOCADIDO in three stages. The instructors meet their classes twice a week and are paid U Shs 45,000 per month, the highest amount paid by any adult literacy programs in Uganda. There is a comprehensive program of monitoring and evaluation supervision and support.

The SOCADIDO literacy and adult basic education programs were not included in the sample for this evaluation, but they have some practices in their methodology and management that could provide some interesting ideas for the future of literacy and adult basic education in Uganda.

Training for Adult Literacy Work

There are two government bodies that offer professional training in adult education and community development work: the Makerere University Institute of Adult and Continuing Education (IACE) and the Nsamizi Institute of Social Development, Mpigi. There are also two significant NGO units whose main focus is training for literacy and adult basic education work, and another promoting adult literacy, LABE and the RCU.

LABE is an indigenous national NGO whose focus is literacy and related services. Started in 1989 by students of Adult Education at IACE, it has attracted support from various organizations, including the World University Service, Canada Fund, and British Department for International Development (formerly Overseas Development Administration [ODA]). LABE has now become a literacy resource organization offering management training, consultancy, and materials to NGOs, with the mission "to work for the spread of effective high quality literacy and adult basic education by supporting communities to start self run literacy education services and promote other community based education." LABE works in partnership with 15 district-level NGOs, community-based organizations in 12 districts, the central government's adult literacy programs, and international NGOs, and is managed by representatives of partner organizations.

Action Aid set up the RCU after several programs in Uganda and other countries had shown interest in trying the new approach and a 1995 international workshop held in Jinja, Uganda, had recommended the scaling up of REFLECT. The RCU was set up to provide training and other professional support to programs that wanted to start REFLECT activities, first nationally and now regionally.

A third NGO deserves mention. The formation of the Kenya Adult Learners' Association (KALA) in 1990 was a milestone achievement toward uniting adult learners in Africa. It led to the formation of the Uganda Literacy and Adult Learners Association (ULALA) in 1992, which promotes learner participation in adult literacy and education programs through low-cost materials production, mobilization, and training.

Socioeconomic Context

In addition to a relatively high rate of illiteracy, Uganda's population is still characterized by high levels of infant, maternal, and adult mortality and morbidity rates; poor nutritional levels; poor sanitation and hygiene; and high levels of unemployment and poverty. The following paragraphs sketch the situation.

Education and the Literacy Environment

At independence in 1962 Uganda had a well-organized system of education that was among the best in Sub Saharan Africa. Since then, civil strife and economic decline have led to serious deterioration in the educational infrastructure. Many primary school classes are now held in temporary structures and under trees, and a large number of the teaching personnel are untrained. After the declaration of UPE (Universal Primary Education) in 1997, enrollment rose from 2.9 million in 1996 to 5.3 million in 1997, underscoring the desire for education among the people—if not for themselves, certainly for their children.

The surge in school enrollments, coupled with the new approach for achieving UPE, make the case for adult literacy more compelling. UPE demands that parents take a more active role in the management of schools and in monitoring their children's attendance and progress. To fulfill these roles, parents need to be able to read and write, if only to understand their children's homework and school reports.

Health and Nutrition

Current health indicators in the 1995 Uganda Demographic and Health Survey show a high maternal mortality rate of 506 per 100,000 live births and infant mortality of 97 per 1,000 live births, with a life expectancy at birth of only 47 years. The average fertility rate is 7, while the proportion of fully immunized children, although rising, has only reached 47 percent. HIV/AIDS is a widespread menace, while health education scarcely exists, health facilities are poor, and health workers tend to be demoralized by their poor working conditions. Health education as a component of adult education programs could be helpful here.

The breakdown of government health services has led to a growing number of private clinics and drug shops managed by untrained people. The necessity to medicate oneself and to read and follow instructions on dosages creates yet another need for literacy. Without it, families, both adults and children, are at risk of overdosing or underdosing and possibly misdoing.

In Uganda poor nutrition remains among the most serious health and welfare problems, affecting in particular vulnerable groups like children, the elderly, and pregnant and lactating mothers. It is estimated that about 26 percent of all children below five years are underweight, 38 percent are stunted, and 5 percent are wasted. Rural families, whether they are literate or not, are equally exposed to poverty, drought situations, and shortage of food. However, those who can read at least have access to information that could help them make better use of what they have.

Socioeconomic Status

Most rural people in Uganda are subsistence farmers whose levels of production often do not feed them adequately, let alone earn them money for other necessities. Raising their cash incomes requires one or a combination of three elements: better agricultural and animal husbandry practices, off-farm self-employment, wage employment. For all three elements, the ability to read, write, and calculate is a decided advantage. For example, the government has put in place the *entandikwa* credit scheme to address the poverty situation in Uganda. Accessing the credit and managing it necessitates a certain level of literacy and numerical skills. Illiterates tend to be excluded. Equally, rural illiterate adults often cannot benefit from the many modern markets that have been established, which involve an increased number of transactions and demand literacy

skills for filling out of forms, travelling elsewhere in connection with business, and other transactions.

Gender Relations

Sustainable national development requires the effective involvement of both women and men, the former accounting for about 80 percent of food production, as well as providing most of family health care. But there are still wide differences between women and men regarding access and control over productive resources, education and training levels, employment opportunities, poverty levels, and participation in politics and accessibility to judicial structures, and, despite the conducive environment created by the present government, illiteracy among rural women continues to be a barrier to the institutionalization of gender equality.

Summary

The need and demand for the people of Uganda to master sufficient skills in reading, writing, and calculating are clear, and the government and several partners are responding to them. In the three years of its post-pilot existence, the government's FAL programs have spread to 26 districts but still only claim to reach 140,000 participants. There are several NGO programs, many of which have absorbed lessons from REFLECT, as well as more traditional approaches to literacy. The total enrollment in NGO programs is currently not available but can be roughly estimated at between 20,000 and 30,000. The combined total is less than 4 percent of the 5 million nonliterate adults, the number estimated by the 1991 population and housing census.

The low state of provision of adult literacy programs is partly a result of the country's history. However, the history of the programs themselves and the evidence that this evaluation will in due course reveal suggest that other interacting factors have contributed to limiting the provision and effectiveness of the programs. For brevity, this complex can be termed the "socioeconomic context": it includes the debilitating effects of poverty, the demands of families and communities on an individual's time, the value a community as a whole places on being literate or educated, and a community's stance toward what it perceives an educational program to be teaching. For this reason, this evaluation has taken a particular interest in the socioeconomic context in which the programs are provided.

CHAPTER 3: THE EVALUATION DESIGN

This chapter offers a summary of how the evaluation was designed and implemented. Fuller details of the approach and the instruments are given in Okech et al. 1999.

The research was designed to answer the following broad questions:

- How effective are the programs in terms of the levels of attainment and retention of reading, writing, and arithmetic skills by the graduates?
- How effective are the programs in terms of facilitating practical knowledge, attitude change, and skills and in terms of promoting income-generating activities?
- What are the main factors affecting performance both "academically" and "practically"?
- Who are the facilitators or instructors?
- What are the conditions for learning, and what is the quality of materials used in the programs?
- What are the costs of the different programs?

In particular, two points need to be borne in mind. First, the word *graduate* signifies a person who completed the literacy course and earned a certificate of attainment. It does not include people who started a course but who for whatever reason did not earn a certificate. The implication is that the possible effects or noneffects on partial participants cannot be assessed.

Second, the emphasis was on outcomes and not on the organizational or pedagogical process—no classes or adult education groups were observed as they undertook a lesson. Further, attendance, dropout, and completion rates were not examined. In short, this evaluation interested itself mainly in people who had satisfied the program's hope that they would complete a literacy course.

Choice of Districts and Approach to Sampling

Because the focus was on outcomes, particularly longer-term outcomes, in terms of skills, knowledge, attitudes, and practices, the unit of analysis was the individual literacy graduate, not the literacy class. The implication is that the influence of individual instructors cannot be assessed. A total sample of 800 graduates was envisaged, comprising two equal groups: 400 recent graduates and 400 who had graduated two or more years previously. The reason for including the latter was the desire to assess how well graduates retained their skills, utilized their knowledge, and changed their lives for the better.

To achieve a national sample of recent and "older" graduates, the intent was to include all eight administrative regions of the country and, within each, select one district in which FAL was operating. Within each of the eight districts, two or three contrasting subcounties with FAL would be selected: they would be contrasted in terms of accessibility from district headquarters, mix of government and NGO programs, and—at least for FAL—effectiveness as perceived by district officials. Within each subcounty 15–20 recent and 15–20 "older" graduates would be randomly selected from the lists of graduates obtained from subcounty offices. This plan had to be modified, as the security situation in two regions caused their exclusion. In the event, 19 subcounties were selected from eight districts in the six remaining regions. Table 3.1 summarizes the pattern.

Table 3.1: Distribution of the Samples by Region, District, Type of Programs, and Language

Region	District	Programs	Language
Central	Mubende	REFLECT	Luganda
Eastern	Iganga	FAL, NGOs	Luganda for FAL, Lusoga for NGOs
	Soroti	FAL and FAL/REFLECT	Ateso, Kumam
Northern	Apac	FAL, REFLECT	Luo
Northwestern	Arua	SCF, WEP	Lugbara
Southwestern	Bushenyi	FAL, NGOs	Runyankore-Rukiga
	Rukungiri	FAL	Runyankore-Rukiga
Western	Hoima	FAL	Runyoro-Rutoro

To compare the characteristics and performance of the graduates with nonliterate people who had not participated in a literacy program, local officials were asked to select 20 nonliterates for interview in each subcounty to act as controls. To obtain some comparative measure of levels of attainment in reading, writing, and calculating, district offices were asked to choose one of the "better" primary schools and either a Grade 4 or Grade 5 class to take the same set of tests as the literacy graduates.

To complement the views of the graduates, a number of instructors, supervisors, community leaders, and officials were interviewed in each subcounty and district.

Instruments

As can be seen from the list below, the instruments used, which are given in full in Annexes 3–6 in the technical volume (Okech et al. 1999), represent both qualitative and quantitative approaches:

- Structured interview questionnaire with mostly closed questions for the graduates and control sample of nonliterates
- Structured interview questionnaire with some open questions for facilitators and instructors
- A test of arithmetic, comprehension, and writing administered to the graduates and control sample of primary school children from Grades 4 or 5 of one of the better schools in each sample district
- Guides for focus group discussions with graduates (including literacy use and benefit analysis) and with nonliterates
- Topic guides for obtaining information from district, subcounty, and local community leaders, and from local district and subcounty officials.

The questionnaires were developed taking into account similar previous surveys in Kenya and Tanzania. Particular care was taken in elaborating the section of questions on the functional knowledge, attitudes, and practices of the graduates to ensure that these corresponded to the material dealt with in the programs. The test instrument was based on the tests currently being

used in different parts of Uganda for the FAL programs. Revised versions of all instruments were piloted and discussed, in preliminary visits with local officials, before being finalized.

Practicalities of Fieldwork and Analysis

Each subcounty was visited prior to fieldwork to ensure cooperation and obtain lists of those who had graduated both recently and two or more years ago. Systematic samples were drawn from those lists in order to select between 120 and 150 from each district, according to what we were told about likelihood of graduates having moved away or died, divided between those who had recently completed and those who had completed two or more years ago. Copies of these lists were sent back to the subcounties prior to fieldwork so that local officials could mobilize those to be sampled. The choice of the control samples of nonliterates and schools were, however, left to local discretion.

During the fieldwork at each location, the graduates were to be given the self-completion test under supervision.[2] They were then to be interviewed individually and preferably in their homes to enable comparison between their responses and their actual conditions. The focus group discussions with graduates and nonliterates were to be organized systematically together with the local organizers. Structured interviews were to be held with all the instructors who were available at the time, as were the semistructured interviews with officials at district and subcounty level and with local community leaders. Because our "main" sample was of adults who had completed the programs (half of them some time previously), many instructors who had been responsible for teaching the sampled graduates were no longer available.

The amount of quantitative data collected is shown in Table 3.2. Fieldwork was accomplished in a three-week period, and data were entered into EPI INFO in Kampala before being analyzed with SPSS-PC. As can be seen, the intended overall sample of 800 graduates fell short of target by only 1 percent, with 793 actual respondents. In only two of the eight districts were the respondents substantially below target, while in three the total exceeded the target. The control sample of 160 nonliterates actually recruited 170, a 6 percent overachievement. The control sample of primary school pupils was achieved in six of the eight districts and, with 274 respondents, provided respectable grounds for comparison. The ratio of instructors interviewed is one for every six graduates, which seems more than adequate.

[2] In fact, many more turned up for the initial tests (possibly including some who had never been to literacy classes) and, to avoid demoralizing anyone, they were given the tests; but only those initially sampled were interviewed, and the results are based on their responses and test performances.

Table 3.2: Sources of Data by District, Sample, And Instrument

District Subcounty	Learners' Interviews	Nonliterates' Interviews	Instructors' Interviews	Learners' Tests	School Tests
Apac					
Akokoro	26	07	05	68	35
Cegere	53	15	06	68	20
Subtotal	79	22	11	136	55
Arua					
Pajulu	08	00	01	08	00
Olli	37	14	04	37	00
Oluko	15	00	01	16	30
Vurra	13	08	01	13	00
Subtotal	73	22	07	74	30
Bushenyi					
Bumbaire	66	11	03	66	00
Nyabubare	59	08	05	59	00
Subtotal	125	19	08	125	00
Hoima					
Buhimba	36	15	07	51	00
Bugambe	60	10	10	52	00
Subtotal	96	25	17	103	00
Iganga					
Bulamagi	53	07	15	66	20
Imanyiro	57	21	13	62	30
Subtotal	110	28	28	128	50
Mubende					
Busimbi	45	00	06	44	20
Maanyi	17	11	03	20	11
Madudu	31	12	09	41	41
Subtotal	93	23	18	105	72
Rukungiri					
Kirima	57	14	06	57	00
Nyarushanje	64	12	04	64	00
Subtotal	121	26	10	121	00
Soroti					
Atiira	39	00	04	61	25
Kaberamaido	57	05	15	85	42
Subtotal	96	05	19	146	67
TOTAL	793	170	118	938	274

PART II: THE LITERACY PROGRAM EXPERIENCE

CHAPTER 4: THE LITERACY LEARNERS IN CONTEXT

The main purpose of this chapter is to learn more about literacy graduates[3] in general and, specifically:

- To examine whether they are different from the nonliterates interviewed in the same districts/subcounties
- To see whether there are variations between the districts/subcounties that might be associated with test performance
- To point toward factors that might affect the ability, motivation, and readiness of literacy learners to profit from their newly acquired skills.

A subsidiary purpose is to examine the extent to which the differences in the average responses between the localities reflect the different field observations, and thus how far the samples of learners are "representative" of their localities. In principle, the tables are based on 793 graduates and 170 nonliterates, but these numbers are sometimes reduced because of nonresponses. We have focused on the differences between the eight districts rather than between the 19 subcounties, partly because we are able to relate our findings to other information most easily at the district level; and partly for ease of presentation.

Learners' Characteristics

This part of the chapter presents the characteristics of the graduates and the nonliterates. Data are presented on the sociodemographic composition of the sample and on their educational and cultural background, their economic activities, their housing conditions; and their exposure to the media.

Sociodemographic Composition

Age and Sex

The majority of adult literacy learners in Uganda are women and, overall, this sample of graduates includes many more women (79 percent) than men (21 percent). However, in four of the eight districts, substantial minorities of men were interviewed. Of the 170 nonliterates, about

[3] It is important to underline again that we are not describing the characteristics of *all* participants in the programs here: these samples are drawn only from those who have completed the course and passed the test or achieved its equivalent (see Chapter 3 and Chapter 8).

the same proportion (80 percent) were women, although nearly half of those interviewed in Iganga were men.

In part, the predominance of women simply reflects the female majority among nonliterates. However, as will be documented later, the focus group discussions showed that, in general, in all eight districts, men are reluctant to join adult literacy classes, partly because they do not want to expose their lack of literacy and partly because the literacy programs have come to be regarded as programs for women, an image reinforced by WEP and several NGO adult literacy programs for women in different parts of the country. However, by way of contrast, in Apac, Iganga, and Soroti, the percentage of men in the sample of graduates was greater than the percentage of nonliterate men in the district.

Table 4.1: Population of Male and Female Nonliterates in Districts (Aged 10 and Over) Compared to Sampled Nonliterates

District	Ap	Ar	Bu	Ho	Ig	Mu	Ru	So	Totals
Males (000s)	43	70	64	24	129	62	43	55	490
Females (000s)	97	161	134	33	207	74	67	102	846
% Female (census*)	70	70	62	58	62	54	61	65	68
% Female (sample)	63	96	91	84	60	72	98	70	

*Figures from 1991 Census, Vol. II, Table A. 8.5.

Nearly 40 percent (300) of the graduates who were interviewed were aged between 30 and 44, about 35 percent were under 30 (274) and only just over a quarter (202) were 45 and over (Table 4.2; 21 did not give their ages). The age distribution of the sample varied sharply across the districts/subcounties: in Hoima, over 35 percent were aged 45 and over, while fewer than a fifth were under 30, whereas in Rukungiri, nearly half were under 30, while fewer than a fifth were aged 45 and over.

Table 4.2: Age, Gender and Marital Status of Samples of Graduates and Nonliterates

	% Female	% 16–29	% 30–44	% 45=	% Married
N	795	274	300	202	794
All graduates	78.9	35.3	38.7	26.0	75.5
CI	70–88	18–52	22–56	9–43	66–86
All nonliterates	79.5	28.7	29.9	41.1	70.5

While women always outnumbered men in the two younger age groups, there were more older men than older women in Apac, Iganga, and Soroti in this sample. The fact can be related to the much lower overall enrollments in primary school (and therefore lower enrollments of boys) in these districts in earlier periods (Bell 1985, Carter 1967).

The nonliterates were older, with 41 percent 45 years or over compared to 29 percent under 30 (almost the mirror image of the graduates). This seems intuitively plausible and corresponds to the overall pattern shown in the 1991 Census. In age distribution, then, the graduates differed from and so were not representative of their districts' populations. Equally, because the nonliterate sample was more closely representative of the districts' populations, it did not strictly constitute a control group for the graduates.

Family Composition

About three quarters of both graduates and nonliterates are married, with little variation between the districts. Interviewees were asked about the number of dependents in several different ways, distinguishing between children at home and those for whom the respondent recognized some financial responsibility. Across all districts/subcounties, and excluding single people, the average number of children for whom the respondents recognized some financial responsibility was just under five, although the average numbers of children at home was just under four. The nonliterates appeared to be responsible for roughly the same number of children and having the same number staying with them.

There was an average of three dependents staying with the respondent and an average total of 6.5 people in the household. While within the broad age groups (16–29, 30–44, and 45+), there did not appear to be any substantial variations between the districts in the number of children either for whom they are responsible or staying with them, in Bushenyi and Rukungiri the number of dependents staying with the respondent were smaller, and household sizes were larger in Iganga. The larger households in Iganga are probably a reflection of polygamy, while the smaller households in Rukungiri are a consequence of substantial out-migration of family members because land is scarce.

Educational and Cultural Background

Primary School Attendance

Overall, 73 percent of the graduate sample (the same percentage for both men and women) had attended primary school (see Table 4.3); and, although this varied from a low of 57 percent in Iganga to a high of 88 percent in Hoima—both of which were significantly different from the national average—this was obviously a very high figure.[4] Of those who had attended primary school, 55 percent (335 of the sample) had reached Grade 4, while 36 percent had spent five or more years in school. Detailed examination of the responses showed close correspondence between years spent in school and grade reached (only 15 percent claimed to have spent more years at school than the grade they had reached). The implied low rate of repetition was plausible for those who went to primary school in the 1970s, although it is also possible that the difference between the two questions was not always appreciated. In the subsequent analysis, five or more years at school is taken as the main criterion of "sufficient" primary education.[5]

Table 4.3: Primary Schooling of Sampled Graduates and Nonliterates

	Went to primary	Mean no. years	1 or 2 years	3 or 4 years	5 or 6 years	7 or 8 years
N	590*	564	130	159	140	135
All graduates	73.3	4.5	16.9	20.7	18.2	17.6
All nonliterates	35.4	3.5	13.4	13.4	2.4	6.3

*Not all respondents who went to school gave us the exact number of years.

[4] If we had interviewed all those participating in the programs rather than just graduates, these percentages may well have been lower.

[5] Conventionally, four years of primary schooling have been presumed to be sufficient for attaining (and retaining) literacy. However, it is increasingly recognized that the quality of the primary schooling in many countries is relatively poor, so we have taken a more conservative threshold

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We note also that only 35 percent of the nonliterates who answered the question had been to school, compared with 73 percent of the graduates. This reinforces the observation that the nonliterates are not a strict control group for the sample of graduates. However, a fortiori, one would expect participants in a voluntary literacy course to have some relative advantages over those who do not volunteer—it is worth noticing that nonliterates exhibit the full range of primary school experience.

For the graduates who went to school, the average number of years of attendance ranged between 3.4 in Soroti and 5.1 in Hoima, and the percentages spending more than five years in school varied substantially, between 20 percent in Iganga and 50 percent in Rukungiri. In sum, 287 of the whole sample of graduates (36.2 percent) had spent five or more years in primary school, which "ought" to have equipped them with the basic skills of literacy and numeracy.

The age of the literacy graduates also makes a difference to whether or not they have been to primary school (Table 4.4). Thus, only 38 percent of those aged 45+ have attended for more than five years compared to 47 percent of those 30–44 and 56 percent of those under 30. The variation by age in the mean years of attendance in the different districts could also be seen as a reflection of the development of primary schooling in each of the districts/subcounties.

Table 4.4: Percentages of Graduates by Age and Years of Schooling among Those Who Went to School

Age	% to school	1 or 2 years	3 or 4 years	5 or 6 years	7 or 8 years	All (%)
16–29	82.2	18.8	25.2	27.1	28.4	39.3
30–44	73.6	25.0	27.3	21.4	25.9	39.6
45+	61.0	27.4	35.0	26.5	11.1	21.1
All (N)	758	128	156	137	131	555

Mother Tongue and Other Languages Spoken

Unsurprisingly, the mother tongue of respondents was different in each district, corresponding to the seven languages used in the FAL programs and in our survey. On the assumption that proficiency in more than one language might be associated with proficiency in literacy skills, we attempted to assess how many languages the graduates could speak. A difficulty arose in defining a second language, as many of Uganda's languages are closely related. After considering a number of options, we preferred to limit proficiency to the ability to speak at least two languages, that is, the mother tongue and one other that was recognized as distinctly different, whether or not it was one of the "major" languages of English, Luganda, or Kiswahili. On this basis, only a fifth of the graduate sample spoke a language distinctly different from their mother tongue. This fact reduced the possibility of using language proficiency as an indicator of literacy attainment.

Some of the variations between districts are easily explicable: Arua has high percentages speaking Kiswahili or Luganda because it is close to an international border and there is a lot of traffic, and, to a certain extent, the same is true in Soroti. For some districts, however, the observed distributions are probably due to the social and political status of different languages in those communities.

Religion

Among the nonliterates, nearly equal numbers reported Christianity and Islam as their religion, but a substantial majority of the graduate sample in six of the districts reported Christianity as their religion. The exceptions were Arua and Iganga, where 42 percent and 35 percent, respectively, were Muslim.

Economic Activities

It is universally acknowledged to be very difficult, especially for an outsider, to ask rural populations about their economic activities. Reluctance to cooperate with and even resistance to such inquiries have been documented in many studies. The responses must accordingly be treated with circumspection. Nevertheless, the data obtained in the interviews do correspond with field observations and can therefore be interpreted with some confidence.

For their main occupation, nearly three-quarters overall reported either subsistence farming (44 percent) or small-scale cash cropping (30 percent). Apart from the periurban sample in Arua—where a substantial fraction were involved in business or employment or "other" occupations—only Apac and Soroti had a substantial minority (34 percent and 35 percent, respectively) involved in "other occupations." Most of these appeared to be involved in trading or—particularly in Apac—fishing. Further, if the combined percentages (for cash cropping and subsistence) are compared with the 1991 Census figures for the proportion farming, it appears that the samples in each district—except Apac and Arua—practiced more agriculturally based economic activities than the general population in 1991. The predominance of small-scale agriculture is a first signal that both graduates and nonliterates are relatively poor.

Learners' Home Environment

As people's homes and amenities can serve as one index of their relative wealth and social status, both graduate and nonliterate samples were asked about their houses and the services they enjoyed.

Houses—Construction Materials and Size

Walls. The majority (72 percent) of graduates' houses had walls of mud, although this varied widely between districts. Among nonliterates, the proportion made of mud was only slightly higher than for the graduates (75 percent). Both these figures are slightly lower than the proportions in the 1991 Census reporting walls of mud and pole or unburnt brick, and they seem to reflect a recent trend toward building more permanent housing (for example, with burnt or cement bricks). Nonetheless, they are a second signal that our samples come from the poorer sections of society.

Roofs. One of the accepted indicators of prosperity in Uganda is the corrugated iron roof. In fact, just over half (54 percent) of graduates used corrugated sheet iron, and most of the remainder (43 percent) used grass or banana leaves. While there were very wide differences between districts/subcounties, the three districts in the northern and eastern regions of the country, which other studies have shown to be the two poorest regions, have only around 10 percent of respondents with roofs made of iron sheets. (These percentages are slightly less than in the 1991 Census.)

More interesting is the fact that a slightly higher proportion of the houses of nonliterates had roofs made of corrugated iron—59 percent. Indeed, the main difference appears to be between the just literate (43 percent corrugated iron roofs) and the two-years literate (66 percent), with the nonliterates closer to the latter. These differences hold true in all age groups. They may be left over from the 1970s, when the collapse of the formal economy left the subsistence economy and those without schooling with more money (Furley 1988).

Rooms. Overall, respondents, both graduates and nonliterates, reported an average of just under three rooms. This varied from an average of 1.4 in Apac and Soroti to 3.8 in Hoima. The number of rooms was apparently unrelated to the number of people per household, and more closely associated with wealth.

Lighting, Toilets, Water

Lighting. The presence of artificial light is not only a proxy indicator of wealth, but also a direct measure of the opportunities available to adult learners for reading in the evening. Overall, 72 percent of the graduate sample used simple paraffin candles, 23 percent had a pressure or hurricane lamp, and only 3 percent had access to electricity. In this respect, the graduates had a clear advantage over the nonliterates, 85 percent of whom relied on a paraffin lamp. Conditions appear to have improved for the graduate households since the 1991 Population and Housing Census, when the percentage of households in rural areas using paraffin lamps stood at 86.7 percent. Nonetheless, the signs are those of relatively poor people.

Toilets. The latrine coverage among this sample is surprisingly high (92 percent) when compared to the national coverage, of 50.6 percent in 1991. Statements by government officials that coverage has not improved much since 1991 are either off the mark or do not apply to these eight districts. During fieldwork, many of the houses were visited, and they did indeed have latrines. While one might have thought that this could be a positive impact of the programs (as this is one of the first activities suggested to learners by the instructors), this cannot be the explanation, since the difference between the percentages of graduates and nonliterates with pit latrines is negligible. There may have been a different interpretation of what counted as a latrine belonging to a household in our survey.

Access to water. Nearly half the sample (43 percent) reported taking at least half an hour to fetch water in the dry season, although this varied substantially between districts, from less than a quarter in Bushenyi, Mubende, and Rukungiri to over 80 percent in Apac and Arua. Once again, the just literate appeared to be slightly worse off than both the two-years literates and the nonliterates, although this varied between districts.

An Index of Housing Conditions

An index of "good" features has been constructed from some of the previous variables by scoring one point for each "good" feature. Thus, a respondent with a wall made of brick, cement, timber, or iron scores one point; with a roof made of tiles or iron, another point; with a floor made of cement or mats, another point; with three or more rooms in the house, another point; and with electrical, solar, pressure, or hurricane lamp, a fifth point; and with access to

water within 10 minutes' walk in both dry and wet seasons, a sixth and final point. The index score therefore varies from zero to six points. For the eight districts (see Table 4.5 below), the index shows an overall average of 1.7, indicating very modest—if not impoverished—living standards for both graduates and nonliterates. Even the most "prosperous" group—the just literate of Iganga—score less than half the maximum possible, while the poorest group—the just literate of Apac—score just 4 percent of the maximum. The index also shows clear differences between the eight districts, from 0.4 in Apac to 2.2 in Hoima and Iganga (see last row, Table 4.5). Within the districts, differences between the graduates (just literate and two-years graduate) and nonliterates are small and inconsistent. Overall, nonliterates seem no better or worse off than graduates, and in this aspect at least constitute a more credible control group.

Table 4.5: Mean Socioeconomic Index Score in Different Districts by Type Of Respondent

	Ap	Ar	Bu	Ho	Ig	Mu	Ru	So	All
Just literate	0.24	1.78	2.19	2.31	2.80	1.79	2.06	0.99	1.65
Two-years graduate	0.43	n.a.	2.08	2.19	2.14	1.83	1.91	0.93	1.84
Nonliterate	0.50	2.00	2.16	1.88	2.27	1.48	1.77	0.60	1.70
All groups	0.37	1.83	2.13	2.20	2.19	1.74	1.92	0.97	

Field observations in the villages tend to confirm the index. Respondents' houses were on the whole poorer than the village average, although nonliterates' houses did seem to be closer to the average than those of the graduates, which might reinforce the previous comment about the 1970s.

Access and Mobility

The interviewees were asked if they had ever visited Kampala (the capital) or any of the major towns in or near the sample districts. Unsurprisingly, the vast majority (91 percent) had visited their local major town. The exception was Mubende, where only 56 percent had visited the district capital, even though nearly 80 percent had visited Kampala. The likelihood of visits from the other districts to Kampala was more or less proportional to the distance: thus, only between a quarter and a third of those in Bushenyi, Rukungiri, and Soroti had visited Kampala, although a surprisingly high proportion of the Arua sample had done so, probably as a result of the specific nature of our sample being drawn from the urban and periurban areas of that district.

There is very little difference between just literates, two-years graduates, and nonliterates; and, although women are less likely to have visited Kampala, the difference is small and not consistent across districts.

Transport

Among the graduates, 48 percent said that they had access to a bicycle (or motorcycle). The proportion of those with transport) varied from 14 percent in Rukungiri, 23 percent in Bushenyi, and 26 percent in Arua to 77 percent in Hoima and 85 percent in Apac. Although there was a gender difference, still 44 percent of women said they had access to a bicycle.

Literacy Environment

Reading Materials in the Home

Overall, 81 percent of the graduates reported having some books in the house, although this varied from a low of 59 percent in Apac (which had the lowest score on the housing index) to a high of 95 percent in Iganga (which had a high score on the housing index). By comparison, only 46 percent of the nonliterates said they had books in their house—a very clear and statistically significant difference.

Literary and School Books

The pattern of availability of specific books varied substantially between districts/subcounties: for example, only 17 percent of the graduates in Rukungiri reported having literary or post-literacy books (despite a relatively respectable score on the housing index), compared with 89 percent in Hoima. The three districts in the sample with the most books were those districts where the government programs were piloted and many primers, teachers' guides, and follow-up readers were delivered. In addition, for Hoima, there were many NGO programs. The sample in Arua were most likely to have school books (60 percent compared to an overall average of 37 percent). The explanation here may be that the urban site of the sample in the Arua district was close to the district headquarters, and the schools there have access to the school books distributed from the District Education Office. Possibly, also, being close to the urban center, they were more likely to buy the books.

Religious Books

The samples in Hoima (where the learners belong to groups supported by World Vision, who promote Bible reading) had the highest percentage possessing religious books, in general; while the sample in Bushenyi had the highest percentage with the Koran. It should be remembered that Bushenyi is one of the richer districts.

Gender Differences

There are only small and inconsistent differences between men and women. The strongest influence here is attendance at primary school: 59 percent of those who had been to school had instructional books, compared to 51 percent of those who had not been to school. As for religious books, 62 percent of the schooled graduates had some, compared to 40 percent of the unschooled. There is a relatively sharp gradient in terms of the *numbers* of books of each kind (see Table 4.6): Those with no schooling had a combined average of 0.6 instructional and religious books, while those with seven or eight years of schooling had an average of 0.8 instructional books and 1.1 religious books.

Table 4.6: Percentage with Instructional and Religious Books According to Level of Primary Schooling

	No primary schooling %	1 or 2 years primary %	3 or 4 years primary %	5+ years primary %
Instructional books	60	64	78	74
Religious books	56	78	95	100

Exposure to Mass Media

Radio is the major means of communication with the outside world. However, while 60 percent had a radio, only 41 percent had a *working* radio (i.e., they had batteries); and the proportion was especially low in Soroti (only 20 percent). This is probably due to the period of civil strife there in the late 1980s and early 1990s, when the area completely lost its major source of wealth, cattle.

Interviewees were asked if they listened to the radio. It is noticeable that while more women than men said they had access in the household to a working radio (43 percent compared to 35 percent), slightly fewer women than men listened to the radio (72 percent compared to 77 percent). The same was true among nonliterates (64 percent compared to 50 percent and 55 percent compared to 64 percent, respectively). There was little difference between the different districts in the listening frequency.

Class Experience

The second part of this chapter presents the graduates' and nonliterates' views of the literacy programs. Data are provided on participation, reasons for joining, reasons for not joining, group dynamics in the classes, reasons for dropout, and what the learners invested in their courses. Information on the kinds of class projects they undertook during or subsequent to the classes or on how much reading, writing, or calculating they have been doing is included in Chapter 7.

Participation in Literacy Programs

Previous Campaigns

A minority of the graduates (about 15 percent) reported having attended literacy classes in previous campaigns, although this was true for only 5 percent in Mubende, probably because it has a relatively mobile and new population. Although 73 percent had been to school for one or more years, only just over 60 percent said that they could write their names (women slightly more than men) before coming to the current classes. However, this varied more widely, between 36 percent in Iganga and 83 percent in Hoima.

Current Classes

There is no information on the composition of the current classes. However, Table 4.7 attempts to combine what data could be found to generate an estimate of the number of new enrollments in the eight districts. It can be seen that there appear to be only very small numbers of new learners in Apac and Mubende.

The evaluation did not attempt to measure the efficiency of the programs in terms of following through a cohort of enrollees to see who has completed and graduated from their course. However, the figures in Table 4.7 suggest that, overall, some 72.8 percent of new enrollees may have passed the course, with variations from about 33.9 percent in Soroti to 99.2 percent in Iganga and even 109 percent in Hoima. Such proportions would be somewhat above the average of the efficiency ratios observed in other countries.

Table 4.7: Estimates of New Enrollments in 1996, 1997, 1998, and 1999 in Each Sample District

	1996		1997				1998				1999	
	3	4	1	2	3	4	1	2	3	4	1	2
Apac	4,820	2,630	2,190	2,235	3,492	501	5,181	2,662	203	1,401	3,983	3,827
Bushenyi	2,212	248	1,964	211	1,813	413	3,364	561	2,063	1,595	3,832	3,827
Hoima	2,894	1,110	1,784	943	5,212	4,262	2,734	4,566	1,790	5,405	881	9,098
Iganga	5,544	1,424	3,120	1,213	4,320	7,462	22	7,553	5,712	6,568	1,878	13,093
Mubende	1,075	--	1,075	--	380	--	1,455	--	406	272	1,589	231
Rukungiri	2,078	--	2,078	--	5,093	3,652	3,523	3,104	2,661	3,829	2,351	6,359
Soroti	1,420	--	1,420	--	2,047	--	3,467		4,421	2,671	5,217	2,272

Notes: 1. Old new learners = cumulative sum of previous new learners minus number of passes.
2. Old passes continued = numbers who previously passed × 0.85 (estimated rate of continuing in class after taking certificate, as calculated from the survey).
3. New learners = our calculation by subtraction (except that for 1996, all enrollments were presumed to be new learners).
4. New passes = figures supplied by the ministry.

Source: Our calculations—not possible for Arua as there were no FAL classes—but similar calculations could be carried out for all districts where FAL is operating.

Reasons for Joining Literacy Programs

The graduates gave a variety of reasons for joining literacy programs, both through the individual interviews and the focus group discussions (a total of 726 responses). *More than half* said that they came simply because they wanted to learn to read, write, and count. In the enthusiasm for *functional* literacy, it is often forgotten that many participants simply want to catch up on what they have missed at school. The only other responses given by more than 10 percent of respondents were to improve knowledge, family care, personal development, and social aspects of life.

During the focus group discussions, a similar set of themes emerged: easy and better communication, improvement of self and family, to avoid being cheated and embarrassed, assisting children with school work, gaining self-confidence, and participation in civic activities. The last three are more fully considered in Chapter 7. We consider only the first two here.

Improvement of Self and Family

Learners in the different focus group discussions expressed in different ways that they decided to join literacy classes in order to improve their and their families' well-being. For example:

- "I wanted to learn English. My husband sometimes used to speak to me in English, and I thought he was abusing me and this led to our divorce."
- "I had some formal education but I wanted to acquire some...vocational skills that would help me earn something for myself and my family."

Some learners said they looked at the functional skills as a way of fighting poverty. Several learners said they wanted to acquire literacy skills and be able to write their own name and do away with the use of fingerprints for identification. Others said they wanted to secure loans and certificates like others.

A learner in Mubende explained, "I received a letter informing me about the death of a relative. I could not read it, and my husband was not around. When he read the letter for me after he had come back, my relative had already been buried. Since then I looked for an opportunity to get literate."

To Avoid Being Cheated and Embarrassed

This was another common theme in the focus group discussions. For example, learners said: "I wanted to be able to identify different denominations of notes and coins"; "My husband used to cheat me on tobacco sales because I didn't know the grades and their respective prices and how much he earned from selling them."

One woman said, "I am a pastor's wife, and I couldn't read the Bible—I couldn't stand in front of the congregation and address them being a pastor's wife. I couldn't preach. I feared to interact with people." Another explained, "When I was nonliterate, I really had problems. One time I took my child to the hospital for treatment. They wanted a sample of the blood, so I was given a chit to take to a person responsible for the task. I did not know where to go and was shy to ask. So, I stayed in one place till evening. My husband thought we were admitted, so he followed me, only to find me in the outpatient department. He couldn't believe his eyes, but that was it. He then took us back home. With his help, my child received treatment the following day. It was an embarrassing experience for me. When WEP came up with the literacy programs for women, I was overjoyed and so joined it straight away!"

Attendance and Absence

About one in six admitted to being often absent and, among the 134 reasons given (each graduate was allowed to give up to three reasons), the main ones were morbidity and death in the family or community (64, or nearly half), work (39, or over a quarter), and family problems (16, or about an eighth). Other reasons for nonattendance that came up during the focus group discussions were learners not being well informed about literacy classes, heavy workload for women, heavy drinking by men, and women being obstructed by their husbands.

Whether or Not Final Test Was Taken

Ninety percent of graduates agreed that they had taken a final test—except in Arua, where there are no government programs, and in Apac (52 percent) and Mubende (69 percent), where of course there are some REFLECT programs, but where the learners do not take a test as such.

Reasons for Not Joining Literacy Classes

The focus group discussions also explored reasons why some of the nonliterates in the community had not joined literacy classes. The reasons given varied: they included negative attitudes, refusal by spouse, peer pressure, heavy workload, sickness, failure to see any immediate tangible benefits, eye problems, and religion. Some examples are given below:

Negative Attitudes

Some examples of negative attitudes that people held about the programs were:

- "After all, there's no difference between me and you as a result of your education, why should I join?" (said by one woman who had not joined the literacy class to another)
- "My husband loved me knowing very well that I was nonliterate, whom do I want to please now by learning how to read and write?"
- "As an old woman they tell me: old woman, what is wrong with you? You are going to die soon. They think old people do not study."

Other learners also observed that some of the young men who are doing well in businesses like produce buying and selling say, "I did not go to school, I cannot read and write, but I have the money, so learning for what?" The learners observed that this kind of talk discourages many middle-aged youth who would have joined literacy classes.

Gender and Power Relations

Some men were said to be suspicious that, when their wives left for literacy classes, other men were going to take them away. So they stopped them from attending. Some women were beaten and had their books destroyed.

Examples of reasons why men did not normally come to classes were:

- "Some see no reasons to stop drinking (*waragi*) and attend literacy classes. Some value playing cards more than attending literacy classes: government should take action."
- "Some men do not want to reveal that they are nonliterate and so shy away from the programs. Others fear to be laughed at, especially middle-aged male youth, thinking that if girls see them attending, they will laugh at them."

Other Responsibilities at Home

Focus group discussions also revealed that some nonliterates did not join because of heavy workload in the home or nursing of sick people in the village. Some learners do not attend literacy classes because they do not want to leave their crops, which might be destroyed by wild animals. One added they have too much work to do, especially in income generation, to sustain their homes, and they know that in the short run they will not benefit much from literacy classes. Others argued that they were too busy to join such programs that were meant for "idlers" whom they locally called "*Mburamukoro*."

Unfulfilled Expectations

Other people had enrolled in a literacy class hoping to get loans from the new government microcredit scheme, *Entandikwa*, but when that did not happen, they pulled out. Another view, expressed by a learner in Hoima, was that most people associate education with employment and a certificate. If the adult literacy programs did not lead to "Makerere" to get a degree or diploma and then paid employment, it was useless to participate.

Other Reasons

Other reasons cited included religion, physical disabilities and incapacity, and the way the programs were started. For example, "Muslims do not allow their women to go out of their homes except for religious functions." Some learners complained of eyesight problems, and not being able to read well and write. One learner observed that "We engaged in too much tobacco farming

and drying through smoking to cure it. So I think this smoke is the cause of my eyesight problem."

In Rukungiri, one of the learners observed that " for those who were not in groups already, it was difficult to start classes and get voluntary instructors. Groups, which were already in existence, identified some of their literate members as good instructors, and those were willing to volunteer to teach without pay."

Group Dynamics in Class

The focus group discussions explored group dynamics in the literacy classes. The most-mentioned issues were age/sex and ability differences in the group,; self-confidence, instructor-learner interactions, and cooperation.

Differences in Age, Gender, and Ability

Some thought that a class worked best when the group was homogenous: "Most of us learners are women aged between 30 and 40 years of age. We interacted freely and could ask our instructors any questions." For some, the mix of ages was an advantage: "The age difference brought cooperation and love among us, with the younger helping the older and vice versa." Others observed that "We feel free to mix with others after we have been assessed and put in appropriate groups according to our initial literacy skills"

However, others felt the age difference created a problem in learning. Some younger learners observed that the older learners drag them behind because they learn slowly, while some older learners observed, "Some male youth are stubborn, they refuse to interact with us, saying you old people are rigid." On the other hand, younger participants felt uneasy when family matters were being discussed, and some felt that the circle would assist only (older) adults.

Sometimes when the teacher helped the slow learners, the others felt she was favoring them. Other learners were of the view that there should be separate days or classes for the different age groups—for example, the older and slower learners should have different classes from the younger, faster learners, and there should be two facilitators

Self-Confidence

Self-confidence was another theme that interacted with age, gender, and differences in educational levels. In Hoima, some learners said, "The old are the ones who always answer. The young are always shy. Those who have been to school have a higher reasoning capacity than we who did not go to school. In family affairs such as cooking, it is women who always answer." Again, "We who did not go to school take long to understand but when we also understand later, we also give some answers."

Both male and female learners claimed that they were not intimidated by the other learners: "The only differences came because of the different levels of literacy. Some knew some basics of reading and writing, and others did not know at all. Those who did not know would feel out of place when left to do tasks together. Later the instructors separated them." There was an impression that those who had never been to school were more committed and development oriented than those who had.

Sometimes those who knew the answer feared to stand up and speak up for fear of making mistakes. In contrast, some men did not fear to talk, even when they did not know.

Handling these mixed groups depended a great deal on the skills of the instructors. A graduate in Iganga observed that "At times, when some people were too quiet, the instructor would try to make them respond also by directing some questions to them." Another graduate observed that "Some particular learners were more talkative than others, but the instructor could control them so that others also had a chance to contribute."

Cooperation

Graduates in Mubende recounted that the spirit of cooperation was high: "Our friend lost a relative the other day and had no transport to go for the burial, so we contributed funds to assist her with transport." Learners checked on one another's homes. Men and women worked together, but during discussion men were more active and contributed more ideas. When husbands and wives studied together, they came to realize the importance of power sharing in the decisionmaking process, for example, about what to do and what to buy. But women whose husbands were not participating usually had a hard time from their husbands, especially if they suggested any changes like putting up a latrine.[6]

Reasons for Dropout

During the focus group discussion, learners explained some of the reasons for dropping out of the programs.

Harassment by Spouse and Peers

Some husbands stop their wives from attending literacy classes, and one woman recounted how the LCs had to intervene to allow a woman to be a drummer on a march for a few hours. Others dropped out because they were constantly laughed at as "idlers" or "*Mburamukoro*." Fellow villagers rebuked them that if they failed to learn when young, how will they manage when old? Some of the men despised learning with women, so they dropped out. They wanted separate classes.

Lack of Opportunities for Continuing Education

In Hoima, a learner observed, "Other learners drop out because they already had literacy skills and wanted to learn other skills, such as bakery, that were not being taught, so they left." Another learner observed, "Some left because they wanted to advance, (e.g., to senior secondary and university) but these programs would never take them that far."

Problems with Instructors

In Bushenyi, a high turnover of instructors was mentioned as a reason for dropping out. In Hoima, some learners gave up because there were not enough instructors. In Iganga, a learner

[6] Comments like "*Asoma mulala, nakola mulala*" were made, which literally meant that those who learn should shoulder the responsibilities of implementing as well.

thought an instructor was criticizing her personally when he talked about overpopulation. Other problems mentioned were drunkenness, irregular attendance, and poor timekeeping on the part of the instructors. The researchers came across a case where the class had virtually stopped because the male instructor often harassed the women by indecently touching them.[7]

Unmet Expectations and Pledges

Other learners were said to have dropped out because of some bad experience. One local politician promised to get them bicycles at U Sh 30,000 a bicycle. Payment would be in installments, with an initial deposit of U Sh 15,000. By the date of the evaluation, neither the bicycles nor the refund had been received. Some husbands who had expected bicycles from their wives used this as a pretext to stop them from continuing with the FAL classes. There were also those who dropped out because they expected immediate material gains that were not forthcoming.

Learner Investment in Classes

Just over half the graduates (52 percent) had to pay for basic learning materials, although there was wide variation, from 33 percent in Apac and Arua to 95 percent in Iganga. About a third claimed that they had also had to make contributions to the instructors/facilitators, again with wide variations, from 3 percent in Bushenyi to 35 percent in Rukungiri.

The majority (547, or 72 percent) claimed that they had to neglect important work in order to attend the classes; this varied from 46 percent in Bushenyi to 90 percent and 94 percent in Mubende and Iganga, respectively. The main examples given of such work (out of 339 reasons) were subsistence and small-scale cash farming, small business, and being an artisan with workshops and contracts to fulfill.

Summary

In terms of examining the possible differences between graduates and nonliterates, the data of this chapter have shown that the nonliterates do not constitute a strict control group in terms of age and schooling, even though they are close to the graduates in the occupations they pursue and in their general standard of what can only be called poverty. This limitation will need to be borne in mind when comparisons are made between the two groups about their knowledge, attitudes, and practices.

More powerfully, the data have shown that the variations within the two samples are wider than those between them, and that these variations are strongly influenced by the district of residence. Whether these large interdistrict and interindividual variations affect the attainment, retention, and use of literacy and numeracy skills and "functional" knowledge will form the focus of the following chapters. Particularly interesting will be the question whether the provision of adequate supplies of good quality instructional materials moderates or accentuates the variations.

The data, when compared with the census, also suggest that the graduates are less representative of their localities than the nonliterates. They tend to be younger and more schooled. Quite apart

[7] It is revealing about the state of supervision in the government FAL programs that it took this evaluation to discover the incident: The literacy center was only six kilometers from the subcounty headquarters, where there was a CDA, whom the program had provided with a bicycle, for supervision.

from the 73 percent of the graduates who had attended primary school, about 15 percent more had attended classes in previous literacy campaigns. The main reason for joining the current classes was that they wanted to learn the three Rs. While both in the responses to the interview survey and in the focus group discussions, the participants did give other reasons, such as improved care of family, not being cheated at business, and so on, it is worth emphasizing that many enrolled simply because they want to learn how to read, write, and count. The implications of these facts will be discussed in Chapter 9, which will deal with our conclusions and recommendations.

The data have uncovered no unusual or unexpected reasons for enrolling in literacy classes and reasons for not enrolling, as well as reasons to explain regular and irregular attendance. They have not clearly pointed toward factors that might affect the ability, motivation, and readiness of literacy learners to profit from their newly acquired skills and so cannot help predict the outcomes that the data should substantiate. However, they should influence how adult educators plan to attract, recruit, retain, and support learners for future education and literacy programs.

A final point: This chapter intended to examine the correspondence between the information given by the graduate and nonliterate samples, on the one hand, and, on the other, the observations made by the evaluators in the field. Our conclusion is a heartening vindication of the general reliability of our respondents. Nothing in our observations was inconsistent with their reports. On the contrary, what we observed tended to confirm what we were told.

CHAPTER 5: THE LITERACY CENTERS AND THEIR INSTRUCTORS/FACILITATORS

This chapter will describe the conditions under which the graduates of the sample are likely to have worked. Its chief source of information is a sample of 111 literacy instructors/facilitators[8] identified by the Community Development officials of the district and subcounty offices and invited to be interviewed and to take part in focus group discussions. Although the instructors do not constitute a strictly random and representative sample, our field observations suggest that they are unlikely to differ much from the general body of instructors in the country. The chapter will look first at the "classrooms" that the instructors and their learners used, then at the materials that were available to them, and finally at the instructors themselves. What sorts of people undertake to instruct others in literacy? Why do they do so? What is their approach to instruction, monitoring, and assessment? What do they feel about their experiences and contributions? In answering these questions, the chapter supplements the views of the instructors themselves with remarks from their students.

The Literacy Centers

Most literacy centers were not purpose built, or indeed even built. Two-thirds of the instructors reported that classes took place outside—under a tree or in someone's backyard. However, 35 percent reported that they were able to use a church, a mosque, a community hall, or even a schoolroom.

For this lucky minority, conditions were better than might have been expected. There was plenty of space, good ventilation, good lighting. The good lighting was partly due to classes being held in the afternoons between 2 and 4 p.m.—and this advantage was shared, of course, by the classes that were held outside. There was less enthusiasm about the cleanliness (with only 57 percent reporting a good level) in their classrooms, and while fewer than a fifth reported good "seating facilities," nearly three-quarters said that "sitting arrangements"—presumably on the floor or ground—were good. None of the eight district samples appeared much better off than the others, although Iganga perhaps had slightly poorer provisions than the average.

Teaching Materials and Aids

Availability of Materials

In the centers that used literacy primers,[9] the availability of the primers varied substantially, from 30 percent in Rukungiri to 94 percent in Mubende. This partly reflects the sequence in which the programs were introduced, with the pilot and earlier districts receiving more generous provisions. Even so, there are clearly some very large disparities both in the distribution of the programs between districts and in the provision of materials (see Table 5.1 for an attempt to relate these to the number of nonliterates estimated by the 1991 Census). For example, in Soroti it could be

[8] As explained earlier, these instructors are not necessarily those who taught the graduates in the sample.
[9] It will be recalled that the REFLECT method does not use primers.

inferred that there are five primers for every enrolled learner, whereas in Iganga there is just one between two learners.

TABLE 5.1: Target Illiterate Population (1,000s) and Cumulative Rates of Provision of Materials and Rates of Enrollments (per 1,000 Nonliterates)

District	Illiterate pop. (1,000s)	Enrollm't per 1,000 illiterates (12/31/98)	Primers	Ratio of learners to primers	Teacher's guides	Follow-up readers
Apac	141	34.2	36.5	1 : 1.1	2.1	27.7
Arua	230	n.a.	n.a.	n.a.	n.a.	n.a.
Bushenyi	167	4.5	14.8	1 : 3.3	0.4	7.5
Hoima	57	50.8	83.3	1 : 1.6	7.0	47.4
Iganga	326	13.9	8.9	1 : 0.6	0.9	9.4
Mubende	136	7.9	14.8	1 : 1.9	2.9	3.0
Rukungiri	107	19.4	37.4	1 : 1.9	2.1	15.0
Soroti	157	9.0	47.8	1 : 5.3	2.5	0

Note: All these are official figures (none were available for Arua). Similar calculations are possible for all 26 districts.

Similarly, there were the usual complaints about the lack of basic teaching materials, but the situation is not uniformly grim. Over 80 percent of the instructors reported receiving primers, which was apparently sufficient for the numbers registered. Much smaller proportions reported having supplementary texts (40 percent), posters (41 percent), cards (36 percent), calculators (34 percent), pamphlets (17 percent). Instructors working for NGOs such as Action Aid, WEP, or SCF were better served.

Relevance of Teaching/Learning Materials

Our content analysis of the primers showed that most of the content in the FAL primers addressed the concerns and problems faced by learners in their daily lives (See Annex 9 in Okech et al. 1999). However, the content differed in the way it was presented in the different primers and the level of detail. This could have affected the learners' possibility of acquiring the ability to express ideas logically, both orally and in writing, and their ability to share such ideas with others, which was one of the specific objectives of the FAL curricula.

Instructors thought that the primers were easy to read and understand, although the new ones had very small letters (this was also a complaint from some of the learners), and that the primers were good because they addressed issues faced by learners in their daily lives. Indeed, this sometimes led to extreme reactions where learners, not realizing how widespread some of the problems being highlighted were, thought it was their own situation that was being discussed. Some male learners also reacted badly to the primer on cooking, as that was a "woman's job."

The instructors also remarked on the wide range in learners' previously acquired skills and suggested that primers should be clearly separated into stages appropriate for learners who attended school and others for those who did not attend school. Some also were concerned that the materials that are supposed to be used are not easy to obtain and are expensive. For example,

one instructor wondered how one was meant to deliver *Ekitobero*, a practical lesson in preparing a balanced meal where the learners are invited to bring the foodstuffs to be used, "when people have been starving for three months, you still expect them to contribute such ingredients!"

Facilitators using the REFLECT approach reported that they found the themes in the guides relevant, since they were developed in a participatory manner drawn from local experience and concerns. However, they asked for more training in materials development, as there was a demand for supplementary readers. Discussions with the facilitators suggested that the pace of progress through the REFLECT units is very variable.

The Literacy Instructors and Their Involvement in the Programs

Who Are the Instructors?

Of the 111 instructors interviewed, 87 (78 percent) were in the government's FAL programs, while 24 (22 percent) worked for NGOs. All the FAL instructors were unpaid volunteers, while the REFLECT, SCF, and WEP facilitators received monthly allowances. These varied among the programs—and, even within programs using the REFLECT approach, they varied according to whether the involvement of Action Aid was direct or indirect (see Chapter 5 in Okech et al. 1999)

Sixty-one of those interviewed were male (55 percent) and 50 (45 percent) were female, contrasting with the gender ratio among in the graduate sample (79 percent female). Table 5.2 summarizes their ages and compares them with those of the graduate and nonliterate samples. As can be seen, the instructors are relatively mature people, on average older than the graduates, but younger than the nonliterate sample. Nearly all were married. A hypothesis that the differences in gender and age might generate differences in preference for teaching methods or styles had to be rejected, as analysis revealed no such systematic differences.

Table 5.2: Ages of Instructors, Graduates, and Nonliterates

	Age 16–29 years (%)	Age 30–44 years (%)	Age 45 years + (%)
Instructors (N=111)	19.8	66.7	13.5
Graduates (N=795)	35.3	38.9	26.0
Nonliterates (N=170)	28.7	29.9	41.1

Just under three-quarters (74 percent) of the instructors came from the same district as their learners. Indeed, 44 of them (40 percent) had actually been born in the village where they were teaching, while another 15 came from the same subcounty. Only 29 were from another district. Further, nearly all (90, or 81 percent) lived in the village where they gave their classes; and even more (85 percent) said that the local language was their mother tongue.

As regards their education, the median level of schooling was S2, two years of secondary education, with the Junior Leaving Certificate. The range was wide, however. In two districts, about 60 percent of the instructors had had only a primary schooling, whereas in two other districts, over 60 percent had at least four years of secondary. The 24 NGO facilitators tended to have had more schooling than the FAL volunteers: two-thirds had completed four or more years of secondary schooling, while only a fifth had not proceeded beyond the primary leaving certificate.

Only 13 of the instructors reported being primary school (or secondary school) teachers, and only four others had salaried employment. The remaining 85 percent had other sources of subsistence or income: 35 said they were subsistence farmers, another 38 said they were "farming" (unspecified) or growing crops, and only 21 appeared to be "in the market" for employment. Even though this is an invited sample, the very small number of primary school teachers in it is unusual compared to the situation in other countries, where primary school teachers teach adult classes late in the afternoon or in the evening. However, in Uganda this is not possible, since nearly all adult classes take place between 2 p.m. and 4 p.m., and the school day runs from 8 a.m. to 4 p.m. What is perhaps more surprising is that there are so few retired primary school teachers apparently involved in the programs. A possible explanation is that, in rural areas, where the bulk of the programs operate, the government's push for UPE has absorbed all available qualified teachers, while those with other qualifications (who have not migrated to urban areas) could well have found employment with an NGO.

Training of Instructors/Facilitators

Most (78 percent) had received the initial training of one or two weeks, and just over half of these (38 percent) had received follow-up training. And just over half again (23 percent) had received further refresher training. But again this varied widely between districts and tended to depend on outside support. In one district, half the instructors had not received even the initial training. Note that *all* the 24 NGO facilitators (in Apac, Arua, and Mubende) had received initial training.

These inequalities between districts in initial training were, if anything, reinforced in terms of follow-up and further refresher training. Again, nearly all of the NGO facilitators had benefited from such training. Several had been on additional short courses in, for example, income-generation projects, AIDS awareness, gender relations, environmental awareness, low-cost materials production, and adult psychology.

The training was particularly limited in the government FAL programs. Many of the instructors had been trained for just three days and had never had any refresher training. This was true also of the supervisors, most of whom have themselves received no orientation in adult education and literacy methodology. Whether this might have affected what the graduates learned will be examined in Chapter 6. Certainly, some graduates commented on their instructors' lack of expertise and experience.

Instructors' Involvement in the Programs

Because of the phasing of the program's expansion, about 60 percent of the instructors had had two or more years of experience, while the remaining 40 percent had had less.

While the majority of instructors had an attendance register (74 percent), only 30 percent appeared to have an admission register. Two-thirds kept a visitor's book (67 percent), but only just over half had lesson notes (57 percent), while even fewer, 31 percent, had a scheme of work. Most of those that were seen appeared to have been well kept. However, the fact that almost half of the instructors/facilitators did not have lesson notes could affect the quality of instruction or facilitation that they can provide.

Rating the Instructors

The graduates were asked to rate their instructors[10] on attendance, punctuality, clarity, commitment, use of teaching aids, teacher-learner relationship, making the lessons interesting, and whether or not the instructor brought in outside speakers. The graduates tended to ignore such fine differentiation and preferred to offer simply a general rating of good or bad overall. Overall, the graduates appreciated the help the instructors gave them to educate themselves.

However, a number of graduates did suggest that some of their instructors needed training, as they were unable to expand on some topics. In particular, when some of the instructors reached practical lessons, which required the participation of an extension worker, they often skipped such sections because they could not get the extension workers to come. Other graduates remarked that the instructors were reluctant to invite the extension workers because they were unable to facilitate the visits with offers of help with fuel for transport or travel allowances.

The Literacy Classes

Attendance and Enrollment

Instructors were asked to estimate enrollments (registration) and attendance at each of their classes over the last four years (if possible from their own attendance registers or exercise books). The average attendance rate over the four years in all the districts was estimated to be 80 percent. Although this varied widely between the districts, the year-on-year average was surprisingly stable. The 20 percent of irregular attendees would include those who had never attended classes, even though they had enrolled, as well as those who were absent from time to time.[11]

Monitoring and Assessment Tools

Most instructors, 81 percent, made some kind of assessment of the learners at entry to the classes. Usually these took the form of interviewing or asking questions (mentioned by 29 of the instructors or facilitators), although some gave written tests or exercises. Nearly all used this information to group the learners for pedagogical purposes (72 percent). It should be noted, however, that the grouping of the learners did not necessarily result in the different groups receiving different treatment. Most instructors ran their centers on their own and, being unpaid volunteers with only minimal training, they would have been unlikely to have had the additional teaching skills required for effective multigrade teaching. More prosaically, it is unlikely that the instructors/facilitators can give the different groups they have identified substantially different special treatment, even if they wanted and knew how to, because of the lack of materials and time.

About the same proportion, 79 percent, used formal assessment tools of some kind during the classes. Usually this involved reading, writing, and counting tests (mentioned by 42 percent), although 13 (12 percent) did say that they also tested skills at handicrafts. This was for continuous assessment, mainly for guidance purposes.

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[10] Bear in mind that the graduate sample were not necessarily discussing the instructors sampled.

[11] See Chapter 4 for the graduates' reasons for absence. Sixteen percent admitted to frequent absence.

Instructors' Views about the Learners

Two-thirds of the instructors reported that there were some quick learners whom they characterized as those who kept time, were always present, participated fully, did homework, and were generally assiduous.

On differences between groups of learners, instructors observed that women were more concerned with literacy than men: "Men do not want other people to know that they do not know how to read and write, so they cannot come, because these people will laugh at them." Some instructors said that youth between 15 and 30 years of age are always shy. They preferred being taught in a private place because they did not want their friends to see them attend adult classes. Because of this, many of them did not attend classes regularly. One of the instructors said, "I have a small room where I teach those learners who are shy, and in privacy." However, another said, "Some of the shy learners in class become active during other activities like music, dance, and drama, and during demonstration activities."

Class Committees

While two-thirds reported that there was a literacy committee, only half reported that it had met in 1999. A wide range of issues was discussed at the meetings; most (86 percent) said that the class committee had discussed income generation, nearly two-thirds (64 percent) that they had discussed literacy issues, and half (50 percent) that they had discussed development issues.

Monitoring, Supervision, and Support

Monitoring

In our field visits to both districts and subcounties, we collected examples of reports on program activities. There was no consistent pattern and indeed it proved difficult to extract consistent information about either enrollments (see Chapter 4) or expenditures (see Chapter 8), especially for the FAL programs. While the CDOs and CDAs had received the new monitoring forms, there appeared to be almost universal puzzlement as to how one could persuade volunteer instructors to complete these on a systematic basis, even if one had the transport to go and visit them regularly (see below). Some of our research assistants, who had previously been field officers in some of the programs, had even more caustic comments. For example, one said of his experience, "We instructors never had registers or questionnaires to show that monitoring was being done.... Even the proficiency test was not well administered. *All* learners were given certificates, including those who could only write their names."

Supervision by Program Officials

Nearly half (48) of their centers were less than five kilometers (three miles) from the subcounty headquarters and so could easily be visited on foot—but a fifth were more than ten kilometers (six miles) distant, which would indeed make regular visits difficult without transport.

In fact, the reported numbers of visits from the CDAs were very low: of the 46 instructors or facilitators who reported receiving a visit from a CDA, fewer than half had received a visit in the last six months. Only just over half had been visited at all by the CDA during the last year. The number of visits was clearly related to distance (see Table 5.3). Nearly half of those centers

within three kilometers had received three or more visits, compared to less than 15 percent of those seven kilometers or more away; indeed, nearly half of the latter had received no visits at all.

TABLE 5.3 Numbers of CDA Supervisory/Support Visits by Distance of Center from Subcounty Headquarters

Distance from subcounty headquarters	Number of instructors/ centers	Percentage of centers receiving no visits	Percentage of centers receiving 1 or 2 visits	Percentage of centers receiving 3 or more visits
1–3 kms	32	25	28	47
4–6 kms	27	44	41	15
7–9 kms	29	48	35	17
10 or more kms	21	48	43	10

While acknowledging transport difficulties, some instructors said that the supervision by CDAs and CDOs was minimal. In Hoima, some instructors observed that "the CDAs do nothing in terms of support," others that "those who used to support us went for further studies." FAL instructors in Mubende observed that the CDA rarely checks classes. In 1998 he checked only twice. "When we need him he is not available due to other activities he is engaged in. We need him to check on us in order to boost our morale and that of learners. We elected a subcounty FAL committee in 1998, but it has never functioned."

Visits by the CDOs were even more rare. In Iganga, for example, one instructor said that "it is very rare to see the Community Development Officer. The last time I saw him was during the literacy day celebrations."

Some instructors, however, acknowledged that they received support in terms of materials or transport or funds for training from the District Office. Although this was sometimes quite substantial, it was irregular and the vote for adult education activities was not received as budgeted: local councils tended to offer the excuse that tax collections were low, so that budgets could not be funded.

Subcounty Local Government Mobilization and Support

In discussion, instructors said that they received minimal support and supervision from Local Councils at the subcounty level. Some went further: "They do nothing about adult literacy." Many complained that LCs do not consider adult literacy important but concentrate on schools. Another instructor said, "They give us nothing even if we run short of chalk, we ourselves improvise." One instructor added, "Moreover, some of them are also nonliterate, but fear to join these classes, which could have helped them improve."

When asked how the 25 percent tax rebate for LCs is used, one instructor said that "No one knows exactly what the money does, because there is no single project or development ever initiated by LCs in this village." Another instructor said that "The money is simply divided among themselves, and when they are asked to explain during meetings, they talk of money having been used to purchase office materials like paper and pens." Another instructor said that LCs deceived the adult learners into believing that instructors receive materials and other benefits, and use them to get things for themselves. "This discourages our learners who are easily

convinced." There was also a story about a donation of literary materials from a member of parliament that had disappeared at subcounty headquarters. However, there were exceptions: In Mubende, one of the REFLECT facilitators reported that "the village LC assisted with buying land to put up learning shelters." Another facilitator noted that, although the LCIIIs did not visit, the RCU came to the subcounty several times in the year the circles started (1998), although no visit had yet occurred during 1999.

The GRC (the local Gombolola REFLECT Committee) was said to assist REFLECT facilitators only by withdrawing their allowances from the bank. They were originally put up to strengthen work, but according to one of the facilitators, "They have not assisted us much and the Village REFLECT Committee [VRC] rarely meets; this is because the chairperson lost interest." In contrast, in the circle where the village LC had bought land, the VRC sits once in a month.

In principle, in each of the districts at the subcounty level, there is an instructors' association for all the instructors in the subcounty that has monthly meetings and helps in monitoring and supervision. However, in the interview, only 34 percent of the instructors said that there was such an association in their locality, and only 28 percent of those said they were members. Moreover, of those, only 15 said that they went to most meetings (nine or more) and six said that they had been to at most three. Nevertheless, where the instructors' association is active, it does appear to be helpful. Thus, in Hoima and Mubende, instructors reported that they did sometimes visit each others' classes as a form of supervision, to find out "how learners are proceeding and the problems faced. We also monitor whether what is taught to the learners is according to the primers."

Support and Supervision by the NGOs

The government's apparently inadequate provision of support and supervision is in some districts augmented by a number of other agencies, both national and international. In Hoima, World Vision has included assistance for FAL in its budget and has helped train 30 instructors, along with support in materials and transport. Some NGOs were involved in the support and supervision of literacy programs in some of the districts. The International Fund for Agricultural Development (IFAD) has channeled support through visiting specialists and through the Community Development Office. Areas supported include short- and long-term training of CDOs/CDAs, rehabilitation of the Rural Training Center, production of a newsletter, provision of bicycles for instructors, and provision of a vehicle for the Community Development Department.

In Iganga, the programs were also supported with materials and training, by LABE, with contributions from the NWASEA and the Multipurpose Training and Employment Association (MTEA). Some instructors observed that there was a duplication of services, especially training, between the Community Development Office and LABE, MTEA, and NWASEA, and some even suggested that NGOs competed with the FAL programs by saying they would pay the instructors.

In Mubende, the facilitators observed that they received some support and supervision from Action Aid. They also observed, however, that the other organs put in place, like the GRC and the VRC, in some places did not function properly partly because of lack of proper delegation, especially on financial matters. Another facilitator observed, "Action Aid acts as if it is paying salaries instead of allowances, because if one does not work for the full eight days in a month, their allowances are cut and yet it requires us to do much more work like preparing reports every month."

Overall, however, most instructors in most districts said that the supervision is not adequate and that there should be more co-ordination between providers. It would be better, and would motivate the learners as well as the instructors, if someone from at least one of the above groups would visit the classes at least once a month.

Attitudes toward Teaching/the Instructors' Expectations

When asked, both through the questionnaire and in focus group discussions, why they decided to teach adults, the instructors gave a variety of reasons. Most responses (101 of the 111, 91 percent) were very general, but they can be broadly grouped as follows:

- "To develop the community": 42 (38 percent)
- "To share my knowledge": 32 (29 percent)
- "For general help": 27 (25 percent)

An example of the more specific responses from the remaining 10 instructors was "I wanted to teach people to learn how to vote. I have deep concern for the people. When I see that they have learnt something, I do not want them to lose it and relapse into illiteracy once again."

Only a few felt that "they could learn from the class" or that broadening their own experience might be an important motivation. Just one said, "I wanted to get more knowledge to sustain me in my life and widen my understanding."

Their expectations as voluntary workers were best explored in discussion. Typical sentiments were:

- "I thought government would take literacy as very important because it tells us as instructors to be exemplary. By helping government, I thought government would also help us by giving us things. But they only give us primers. Even if we dress without washing our clothes, government doesn't care."
- "I used to see other people in other areas in FAL classes developing, so I wanted to develop. I was once a learner. After understanding and benefiting, I wanted to assist my people also to learn how to read and write. We thought, however, our voluntary work would be rewarded in future."

One literacy instructor asked, "Why is it that it is only the Department of Community Development that expects people to work for free and not other ministries?" There is some substance in this complaint: for example, when CDAs work for PEARL (Programmes for the Enhancement of Adolescent Reproductive Life) or RUWASA (Rural Water and Sanitation), they receive not only lunch and travel expenses, but also a "facilitation" allowance (essentially a small honorarium).

One of the instructors (in Kiduuma, Hoima) said, "We really volunteered with our heart but with hope that one day the government would reward us, and with the hope that people would benefit and the whole community would develop. If people put into practice what I have taught them, then I will be happy and they will reward me." He also said that he worked with the hope that God would reward him. He was happy with his involvement in the programs: he had traveled, been given a bicycle and a radio for being the best instructor in the subcounty, and was even elected as LCI Chairman in Kiduuma.

The following responses typify what the instructors felt about what should be done to improve the situation:

- "I will continue teaching. Maybe government will remember us; now that you have come; tell them that we are badly off, we need money."
- "The money used for functions, for example on Adult Literacy International Day, should instead be used to meet our expectations."
- "We also want training so that we can teach English to our learners. We also want to be treated with respect and to be considered as important members in the community."

Teaching Preferences

On the whole, the instructors preferred to teach reading and writing (58 percent)—and, not unsurprisingly, said that was what their learners preferred (72 percent). Just over half of the instructors (52 percent) preferred teaching adults. Among those who preferred teaching children, nine said it was "because they were more obedient."

Twenty-five (23 percent) of the instructors stated that they were happy with their "job" as a literacy instructor, while nearly two-thirds professed themselves unhappy. Yet in a count of 130 responses, the reasons for satisfaction seem to outweigh those for disappointment (Tables 5.4 and 5.5).[12]

Table 5.4: Instructors' Reasons for Unhappiness

Unhappy responses	N	%
Disappointed = still disappointed about lack of allowances/salaries/incentives; learners do not want to contribute anything; is demoralized because of lack of incentives	33	37
Lack of materials and support = lack materials, e.g., primers, teaching aids; lack of assistance from CDA; we do not have uniforms and cannot be identified as a group	16	18
Total number of responses, negative and positive—130 (100%)	**49**	**37.7**

Table 5.5: Instructors' Reasons for Satisfaction

Satisfied responses	N	%
Positive status = taken as a very important person in the community; is recognized and respected; sharing is a good thing	18	20
Make an impact = I am making a contribution to the development of this area (he is therefore happy); sees the results of his teaching and is therefore grateful; made an impact on those who did not know anything, and feels they are making a contribution	17	19
Other positive = there is a lot of participation by learners; they are highly motivated and thank me for assisting them	46	35
Total number of responses, negative and positive—130 (100%)	**81**	**62.3**

[12] Instructors/facilitators were allowed to give multiple answers, and those who felt positive were more likely to give several responses!

To test the instructors' feelings further, we employed a method that has been used to gauge the level of self-esteem of an occupation. Incumbents are asked to rank a number of similar occupations, including their own. The sampled instructors were asked to rank the occupations of (1) CDA, (2) primary school teacher, (3) veterinary assistant, (4) adult literacy instructor, (5) agricultural assistant, and (6) health assistant. On average, they assigned the highest rank to health assistant, the lowest to veterinary assistant, while the adult literacy instructor came just above at fifth.

Suggestions for Improving the Instructors/Facilitators' Conditions

During the focus group discussions, most of the instructors said that their expectations had not been met. They made a number of recommendations that included their being paid a salary and being assisted with transport, loans, and other incentives. They also asked to be provided with enough teaching materials to enable them to do their work properly. These are some of the recommendations made:

- "Government should think about giving us a salary like other government workers. Why should we work for free? We should also be paid like other teachers."
- "Government should provide us with the necessary materials to enable us do our work properly. We need blackboards, chalk, books, etc."
- "Government should also think about giving us other incentives, like soap, uniforms, such that we also look smart before people. We want bicycles for easy movement and some grants. We are not respected because some learners are always smarter than us."
- "Government should construct literacy classrooms like for children so that we do not teach from the open, which at times discourages adults who are shy and do not want others to know that they are nonliterate—especially men."
- "Local councils should be sensitized about the importance of literacy such that they can assist in mobilization. Officials at the LC level, subcounty level, district level give no priority to adult literacy."
- "As trainers, there is need for refresher courses to improve our skills—stop relying on extension workers because they have proved to be inefficient. We should be trained in the technical points so as to stop depending on inefficient extension workers."

Summary

Most of the sampled instructors operated in premises that were not ideal, with a majority using spaces in the open air. Most reported that they had the basic teaching materials; but in some districts, substantial minorities had neither blackboard nor chalk. Instructors supported by NGOs were better served in terms of these basic materials.

On the whole, the instructors thought that the primers were relevant to the everyday concerns of learners, although there was considerable variation among the primers of the different languages in the depth and quality of the treatment of core issues such as health, sanitation and water, children's education, gender relations, and governance.

While the FAL instructors are pure volunteers, those facilitating NGO classes or circles receive some kind of allowance. Most of the instructors were local; and nearly all said that the local language was their mother tongue. Over 40 percent of FAL instructors had, at best, completed the Primary Leaving Examination (PLE), and the same proportion had S4 (four years of secondary)

or above. In contrast, two-thirds of NGO facilitators had S4 or above, and just five of the 24 had only completed PLE. These differences were reinforced in terms of training: not only had all the NGO workers received the initial course, compared to three-quarters of the FAL instructors, they were more likely to have received follow-up of refresher training.

Nearly all said that they used some kind of assessment tool at the beginning of the classes, but very few were able to use this information to teach the learners in different groups according to their starting levels. During the courses, nearly all used some form of continuous assessment such as reading, writing, and counting tests.

The instructors report that their experiences of monitoring, supervision, and support were depressing. Only a minority had received any supervisory visits from their CDA; and it is difficult to believe that this is only because of lack of transport, because many of the centers were close to the subcounty headquarters. It seems that other programs receive greater attention, because they give the CDAs expenses and sometimes an honorarium.

The current monitoring framework for FAL has been designed centrally and then handed down to the districts for onward transmission to the subcounties and eventually to the instructors. It depends on the completion of quite complex forms by unpaid volunteers who are already complaining about the lack of incentives. It is unlikely to produce reliable data. Monitoring procedures—beyond simple head counting for accountability purposes at district and national levels—are more likely to work if they are seen as useful by the form-fillers themselves (Carron and Ngoc Chau 1997, Chapter 13).

PART III: PROGRAM OUTCOMES AND COST-EFFECTIVENESS

CHAPTER 6: LITERACY PROGRAM ATTAINMENTS

This chapter narrates and analyses findings about:

- The abilities of the graduate sample and its subgroups to read, write, and calculate, in comparison with the abilities of primary school pupils in Grades 3 and 4 to handle the same tasks
- The knowledge, attitudes, and practices that the graduate sample have learned from their curriculum, in comparison with the knowledge, attitudes, and practices of the invited sample of nonliterates.

It attempts to identify and weigh the factors that influence attainments in the basic skills of literacy, the retention of knowledge, the incorporation of knowledge into attitudes, and the incorporation of professed attitudes into behavior and practice.

The chapter assesses much of the data on the basis of the eight districts. However, where appropriate, it also looks at the possible influence of the 19 subcounties within the districts.

Test Results

The original intention of the government FAL programs was to provide a course that would lead to basic competencies in reading, writing, and numeracy and the acquisition of knowledge, skills, and attitudes based on the needs and problems of the learners and their communities. But the government never determined what constituted "basic literacy competencies," so that the tests actually used by the FAL programs vary across the districts and none of them can be used as a standard test.

To carry out a *comparative* evaluation across the eight districts therefore required the construction of a special test that could be administered in all of them. We therefore developed a test that covered reading, writing, and arithmetic in four sections: simple comprehension, numeracy, complex comprehension, and writing.[13] The designers of the FAL programs agreed that the items fairly reflected what they expected an adult learner to attain and know through a year's (200 to 300 hours) regular participation in a literacy center, so that theoretically every

[13] Note that there is overlap between the sections for numeracy and more complex comprehension, as questions in the latter include numerical calculations; the learners have to be able to be able to use basic writing skills (calligraphy) in answering both the comprehension sections of the test, while the writing section requires them to transcribe their own thoughts into words on the paper.

learner should be able to respond correctly to every item. The detailed construction of the tests is explained in Chapter 3; the text is given in full in Annex 4 of Okech et al. 1999.

The performances of the graduate sample are presented in the form of mean scores and standard deviations, as these measures show objectively both the average performance and the variability within the graduates' attainments. As empirical evidence, they should help the program's designers adjust what they feel they can expect from the learners, instructors, and time on task. After the presentation of performance, regression analysis is used to assess the factors that might influence the variability.

Literacy and Numeracy Skills Acquired

A total of 751 of the respondents to the interview questionnaire took the test.[14] The numbers taking test in each of the districts and the scores they obtained are shown in Table 6.1. For the writing test, two means are given. The reason is that a number of graduates either did not attempt the writing section at all or abandoned their effort when they were only part way through. The first mean shows the attainments only of those who completed the writing test as a subgroup of the district sample. The second mean shows these attainments as a reflection of the entire district sample. Large differences between the two means denote that larger proportions of the district sample declined the writing test. On the simple comprehension, numeracy, complex comprehension, and writing sections, the average scores were 94 percent, 67 percent, 50 percent, and 39 percent, respectively. While nearly all the sample managed to complete correctly what we called the simple comprehension section, so that the scores hardly varied (although learners in Arua scored only 77 percent),[15] performance did vary substantially between districts on the other sections of the test. The differences between means of the highest- and lowest-scoring districts on the sections are as follows:

- For numeracy, 22.8 percentage points
- For complex comprehension, 28.4 percentage points
- For writing score (using the whole sample, last column), 17.5 percentage points.

Table 6.1 reveals not only the variability between the districts, but more importantly for program designers, the variability among the graduates. The coefficients of variability range from .29 for numeracy in Rukungiri to as much as 1.34 for writing (everyone) in Arua, with 20 of the maximum 32 such coefficients rising beyond .50. The sources of this variability among the gradates will be examined shortly.

[14] It was not always possible to interview all those who had taken the test, which accounts for the difference between the numbers here and in Table 3.2. Note also that, although many other villagers not in the sample turned up to take the test, their results are *not* included in these tables

[15] At the time of the test, the graduate sample in Arua had had a program for only one year. Even though that time is officially estimated to be sufficient to complete this special test correctly, it would not be surprising if the Arua group did less well than the others.

Table 6.1: The Mean and SD in Test Scores per District

District	Max N	Simple comprehension		Numeracy		Complex comprehension		Writing score (attempts only)		Writing score (everyone)	
		M	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Apac	78	90.0	23.9	64.7	38.1	46.5	37.5	47.6	24.3	38.0	29.0
Arua	73	77.0	31.9	54.0	34.9	38.9	35.3	64.3	44.7	33.7	45.3
Bushenyi	124	94.2	17.5	54.4	35.9	41.9	35.5	51.7	23.1	33.8	30.9
Hoima	81	96.2	12.1	76.0	30.3	58.2	36.8	52.8	14.7	48.2	20.5
Iganga	102	94.9	12.7	66.0	31.3	51.4	34.9	49.5	32.0	34.5	28.6
Mubende	82	97.3	10.8	69.5	30.6	57.5	34.5	45.2	13.8	38.0	20.9
Rukungiri	119	99.1	3.4	76.8	22.3	65.6	29.2	58.6	25.5	51.2	30.8
Soroti	92	97.3	8.1	71.5	25.7	37.2	30.8	50.4	18.2	35.6	20.7
All districts	751	93.9		66.6		49.5		52.3	22.6	39.3	30.5

To examine whether or not the district samples are consistent in varying from each other, Table 6.2 sets out the ranking of each sample, with the highest mean score attracting rank 1 and the lowest mean attracting rank 8. Although consistency is not perfect, the graduate samples in Rukungiri, Hoima, and Mubende do score consistently better than the five others.

Table 6.2: Ranking District Samples by Mean Score on Tests

District	Max N	Rank for simple comprehension	Rank for numeracy	Rank for complex comprehension	Rank for writing score (everyone)	Average rank
Apac	78	7	6	5	3	5.25
Arua	73	8	8	7	8	7.75
Bushenyi	124	6	7	6	7	6.5
Hoima	81	4	2	2	2	2.5
Iganga	102	5	5	4	6	5.0
Mubende	82	2	4	3	3	3.0
Rukungiri	119	1	1	1	1	1.0
Soroti	92	2	3	8	5	4.5

Table 6.3 offers a rough test of correlation between the average ranks on the test and the ranks on socioeconomic index in Table 4.5, with the district with the highest score on the index attracting the rank of 1. Even eye inspection shows that there is no necessary correlation between socioeconomic conditions as measured in this study and performance on this special test.

Table 6.3: Comparing Test and Socioeconomic Ranks

District	Rank on socio-economic index	Average rank on test	Difference in ranks
Apac	8	5.25	2.75 (34.3%)
Arua	5	7.75	–2.75 (34.3%)
Bushenyi	3	6.5	–3.5 (43.7%)
Hoima	1	2.5	–1.5 (18.7%)
Iganga	2	5.0	–3.0 (37.5%)
Mubende	6	3.0	3.0 (37.5%)
Rukungiri	4	1.0	3.0 (37.5%)
Soroti	7	4.5	2.5 (31.2%)

Quite apart from variability, the mean scores signal that what the program designers seem to expect from nonliterate adult learners and the people who undertake to teach them may be excessive, particularly as regards writing.[16] This special test was designed to be within the competence of anyone who had officially graduated from the government programs. Yet, as Table 6.4 below shows, only those who have had seven or eight years of primary schooling achieve what could be called satisfactory mean scores. If, over the entire sample, these officially successful graduates are able to achieve a mean score for numeracy of only 66.6 percent, for complex comprehension, only 49.5 percent, and for writing, only 39.3 percent; should the designers not revise their designs?

The relative performance on each item of the test has also been analyzed (see Table A6.1 in Annex 8 of Okech et al. 1999). Within the numeracy section, the most difficult items appear to have been those involving subtraction. Within the complex comprehension and writing sections, analysis was frustrated, as many graduates attempted only the first item of each section and then abandoned the rest (and so are not included in the denominator for the other items in that table).

The correlation between the scores attained in the different sections were also examined (see Table 6.4). There are statistically significant associations between the scores attained on the different domains; and the association between the numeracy and the complex comprehension score is especially high. The patterns of associations are rather different for those who have just passed the test and those who passed two or more years ago. For the just literates, the associations are very strong between the first three sections of the test, but the associations between these sections and the writing score are relatively weaker; for the two-year literates, the associations are weaker between the first three sections of the test, but the associations between the writing score and the scores on the other sections of the test are stronger. One might speculate that the focus for the participants when they first join the class is on the most basic skills of calligraphy, comprehension, and numeracy, but that they become more interested in writing after they have passed the basic certificate.

[16] Interestingly, the mean scores on this test support evidence from elsewhere that writing is the most difficult skill to master. Despite intuitions to the contrary, people seem to make faster progress in calculating than they do in writing.

Table 6.4: Correlations between Scores on Different Sections of the Test

	Numeracy	Complex comprehension	Writing score (only attempts)	Writing score (everyone)
For just literates				
Simple comprehension	.554	.457	–.309	.264
Numeracy		.746	.083	.386
Complex comprehension			.138	.481
For 2-year literates				
Simple comprehension	.372	.327	.101	.273
Numeracy		.704	.268	.467
Complex comprehension			.281	.503

Retention of Literacy Skills

Originally, it had been presumed that, at least in relation to the FAL programs, we would be able to assess the longer-term retention of literacy skills by comparing those who had taken the final test over two years ago and those who had only just taken it (on the presumption that the former were no longer receiving instruction). Although it was indeed possible to do this, the potential sample of the two-year literates was much reduced by the fact that most of the graduates of this sample had continued with their classes after they had passed the test. Table 6.5 presents a comparison of results for those who are still attending classes with the relatively small numbers who continued for a while after the final test but who had left by the time of the evaluation, and with those who left the class immediately after the final test. Overall, the differences between the three groups are not substantial, which suggests that graduates do retain their literacy skills for at least two years with little or no deterioration.

Another perspective on retention is provided by the participants themselves. Those who had attended classes longer than two years previously, 362 persons, were asked whether they thought they had improved their skills. The majority thought they had, 85 percent in reading and writing and 78 percent in arithmetic. If, however, one counts those who say "don't know" as not having improved, then the percentages reporting improvement would, of course, be much lower, especially in Hoima, Mubende, and Soroti, where very few gave a positive answer.

Table 6.5: Comparing Scores for Those No Longer in Class

Attended after test	N	Simple comprehension	Numeracy	Complex comprehension	Writing score (only attempts)	Writing score (everyone)
No and not now	52	94.0	61.8	47.6	47.9	32.3
Yes but not now	31	96.4	77.1	45.2	45.7	41.3
Still attending	373	93.3	68.4	54.0	52.1	38.6
All districts	751	93.9	66.6	49.5	52.3	39.3

Note that, in two of the districts (Bushenyi and Rukungiri), the question about "whether or not still attending current classes" was not asked and so the results are based on the scores from the other six districts (with smaller sample numbers).

Table 6.6: Percentages Reporting Improvement Since the Proficiency Test (Including Only Those Who Gave a Positive Answer)

	Ap	Ar	Bu	Ho	Ig	Mu	Ru	So	All
Average (%)	37	n.a.	89	76	70	95	92	83	83
N responding	37	—	115	8	51	19	120	12	362

n.a. = not applicable, as the program in Arua was only one year old.

Differences in Mean Scores by Prior Ability to Sign One's Name, Age, Gender, Previous School Attendance, and Length of Exposure

The following paragraphs examine the graduates grouped in different ways to see whether the nature of the grouping affects the mean scores. To help anchor the discussion around a single comparator, the scores for "all districts" shown in the bottom row of Table 6.1 are used in the tables to seek subgroups of individual respondents who perform better than the average. Table 6.7 looks at four groups: those who could write their name when they started, those who could not, those who had graduated two years or more previously, and those who had just graduated. The data show that those who could already write their names performed substantially better on all the tests than those who could not. This unsurprising finding will recur below, in the examination of the influence of schooling.

The differences between those who had graduated two years or more previously and those who had just graduated were much less wide and less consistent. In part, this could be a reflection of the fact that most of the sample graduates continued their attendance at literacy classes, so that they would have reinforced and possibly improved their skills. It could also confirm that literacy skills are not subject to rapid short-term deterioration.

Table 6.7: Mean Scores by Starting Point and Length of Time since Test Was Passed

Reading ability before course	N	Simple comprehension	Numer-acy	Complex comprehension	Writing (attempts)	Writing (everyone)
Could write name	457	97.3	73.3	59.8	53.8	44.3
Could not write name	262	90.1	57.7	40.8	48.9	31.1
Just literate	386	91.4	66.9	50.1	53.7	39.2
2-years literate	365	96.5	66.4	53.4	50.9	40.0
All literates	751	93.9	66.6	51.7	52.3	39.3

Age and gender are two factors that could influence performance. Their effects are examined in Table 6.8. As regards age, there is a clear trend in favor of the younger graduates. Those younger than 30 years tend to do better than those between the ages of 30 and 49, who in turn tend to do better than those older than 50 years. However, the differences between the age groups are not chasms, and large proportions of older people clearly learn successfully, despite their vulnerability to factors such as poor eyesight and physical disadvantages.

As regards gender, even though the men are on average older than the women, they score better than women on each section of the test, and the differences are statistically significant except in the subgroup *attempting* to write. In this case, the women who have the courage and determination to write do as well as their male counterparts.

Table 6.8: Mean Scores by Age and Sex

Sex	N	Simple comprehension	Numeracy	Complex comprehension	Writing score (attempts only)	Writing score (everyone)
Male	160	97.0	75.5	58.8	52.4	42.3
Female	591	93.0	64.2	49.8	52.3	38.5
Age						
16–29	256	94.9	71.7	56.4	54.7	43.2
30–49	254	93.9	69.5	54.8	51.1	39.2
50+	153	90.5	50.7	42.2	51.6	34.8
Comparator	751	93.9	66.6	49.5	52.3	39.3

Table 4.3 showed that nearly three in four of the graduates had been to primary school before joining a literacy class. Table 6.8 examines whether schooling had an effect on performance in this special test. The data confirm the commonsense expectation—already strengthened by the performance of those who could sign their names—that those who went to primary school would perform better than those who did not. The advantage holds in all sections (see first two rows of Table 6.9). Further, performance according to the numbers of years (or the class reached) at primary school shows (Table 6.9):

- Hardly any variability on the simple comprehension section (although those who went to primary school for more than one year performed better than those who only went for one year)
- Steady improvement on the numeracy section, from 67.8 percent for those with only one or two years at school to 87.5 percent for those reporting seven or eight years at primary school
- Steady improvement on the complex comprehension section, rising from 57.8 percent for those reporting only one or two years at school to 81.0 percent for those reporting seven or eight years at school
- Steady improvement on the writing section, rising from 50.5 to 61.2.

Table 6.9: Mean Scores by School Attendance

Went to primary?	N	Simple comprehension	Numeracy	Complex comprehension	Writing score (attempts only)
Yes (N=540)	540	97.1	74.1	59.8	53.7
No (N=190)	191	84.9	47.8	31.8	46.5
Comparator	751	93.9	66.6	49.5	52.3
Years in primary					
1 or 2	118	97.5	67.8	57.8	50.5
7 or 8	131	99.6	87.5	81.0	61.2

There is a similar relation with the number of years of literacy class exposure, although those who had been attending for four years tended to perform no better than those who attended for three years (Table 6.10).

Table 6.10: Mean Scores by Exposure to Current Literacy Classes

	Simple comprehension	Numeracy	Complex comprehension	Writing score (attempts only)	Writing score (everyone)
Attended literacy classes in previous campaigns					
Yes (N=42)	90.2	60.8	47.0	49.0	37.8
No (N=453)	92.9	67.7	51.6	50.5	37.1
Length of exposure to current literacy classes					
1 year	93.7	64.1	48.8	53.6	40.3
2 years	90.4	65.1	46.6	52.8	37.7
3 years	96.2	73.3	53.1	50.0	37.2
4 years	93.9	66.7	51.6	52.3	39.2
Comparator	93.9	66.6	49.5	52.3	39.3

It could be that those people found more difficulty with literacy, but breakdowns in that subgroup by age, gender, and whether or not they could write their name when they started shows no particular pattern (although of course the numbers are very small); possibly they had come for other reasons and were not interested in the three Rs. Although the differences are much larger with years of primary schooling than with literacy class exposure, we should note that, while the results by length of schooling show that there are increases according to the number of years of schooling, these are over an eight-year period. The gain per extra year of exposure to primary schooling is 4.2 points on numeracy, 6.6 on complex comprehension, and 3.0 on writing, while the gain per year of literacy class exposure is 3.0 points on numeracy, 1.5 points on complex comprehension, and none on writing. Of course, the time input into a year of schooling is much greater than into a year of a literacy program.

The breakdowns by other aspects of the literacy class are shown in Table 6.11. Those who were often absent indeed received lower scores than those who attended more regularly. Those who paid for materials, made contributions, or claimed that they had left important work undone, all did better on all four sections (although this may result from their being generally better off); and, indeed, those who paid more for materials did better than those paid less! Perhaps more importantly (from the point of the programs), those who said that they had generated income, subsequently undertaken some form of income generation, and improved their life because of these projects, all did better.

Table 6.11: Percentage Scores by Literacy Class Experience

	N	Simple comprehension	Numeracy	Complex comprehension	Writing score (attempts only)	Writing score (everyone)
Comparator	**751**	**93.9**	**66.6**	**49.5**	**52.3**	**39.3**
Often absent	109	90.4	66.4	51.1	51.7	39.6
Rarely absent	610	95.3	67.7	52.9	56.7	39.0
Paid for materials?	447	95.8	69.7	55.9	53.1	41.6
Under 400	90	95.9	67.3	48.8	50.6	39.3
500–950	129	96.0	72.9	56.1	50.4	38.6
1,000–4,000	170	94.9	69.5	58.1	54.9	43.9
5,000–40,000	44	99.5	74.2	68.4	55.2	50.0
Made contribution?	129	96.4	66.8	53.8	48.3	38.5
Left important work undone to attend class?	533	95.6	70.8	55.6	52.6	41.4
Generate income during lit. class?	446	96.3	70.5	57.3	52.5	41.8
Subsequent income generation?	362	96.8	71.4	59.0	52.6	43.1
Life improved because of these projects?	413	96.6	70.6	57.9	51.9	41.8
Comparator	751	93.9	66.6	49.5	52.3	39.2

Performance by Type of Programs

A secondary objective for this evaluation is to assess the difference between the performances of participants in the FAL, REFLECT, and WEP programs. Because the district is such an important factor in influencing performance, it would be risky to compare programs that operated in different districts. For this reason, a comparison between FAL and SCF and WEP would not be a sensible comparison, since FAL does not yet operate in Arua, while SCF and WEP are found only in Arua. However, as both FAL and REFLECT operate in Apac and Mubende, Tables 6.12–6.14 undertake a comparison between them.

The data suggest that the participants in the REFLECT programs always do better than those in the FAL programs, and in some cases by a substantial margin (Table 6.12). However, this is not the end of the story, as a comparison of the number of years of schooling reported by the participants shows that participants in the REFLECT programs have had more schooling (Table 6.13). Comparing the performance of participants with the same level of schooling in the FAL

and REFLECT programs in those two districts,[17] reveals that participants with no or little schooling do better with the FAL programs on the last three sections of the test (as there was not much difference on the first section). Those with three or more years of schooling do substantially better in the REFLECT programs on the comprehension section, just significantly better on the numeracy section, but only marginally better (the difference is not statistically significant) on the writing section (Table 6.14).

Table 6.12: Mean Scores by Type of Program

District	Type of program	N	Simple comprehen-sion	Numeracy	Complex compre-hension	Writing (attempts)	Writing (every-one)
	Comparator						
Apac	FAL	52	86.1	53.8	32.9	43.0	32.4
	REFLECT	26	97.7	86.3	65.7	55.6	49.2
Mubende	FAL	29	98.9	64.8	49.7	41.0	35.3
	REFLECT	70	97.1	69.7	60.7	46.0	40.1

Table 6.13: Numbers with Different Levels of Schooling in FAL and REFLECT Programs in Apac and Mubende

	Apac		Mubende	
	FAL	REFLECT	FAL	REFLECT
No schooling	35	0	20	17
1–4 years	17	3	5	30
5–8 years	2	21	2	43
Total N	64	24	27	90

Table 6.14: Mean Scores on Three Tests in FAL and REFLECT Programs According to Different Levels of Schooling

	Numeracy		Comprehension		Writing	
	FAL	REFL	FAL	REFL	FAL	REFL
No schooling	45.3 (N=55)	28.4 (N=17)	27.2	22.2	25.6	17.9
1–4 years	58.1 (N=22)	64.7 (N=33)	35.6	52.9	29.6	35.8
5–8 years	76.9 (N=4)	86.3 (N=64)	57.6	73.5	44.0	47.3

[17] Given the small numbers involved, small sample tests for significance have been used.

Other Factors

Religion and Languages

There were not really sufficient non-Christians to generate reliable findings related to religion, so we can note only that Christians performed better on all sections (except where only attempts were considered on the writing section), although the difference on the writing section was not statistically significant. Those who said they could speak two or more languages a little or well or very well did better than those who could only speak one language.

Socioeconomic Conditions

There are only small associations between the characteristics of the learners' housing (presumed to be an indicator of socioeconomic status) and their score: with perhaps the clearest relationship with the source of lighting; the relationships were smaller for the time taken to collect water.

Travel

The acquaintance of the respondent with other towns has a small effect. Those who had been both to Kampala and their own district capital scored higher than those who had been to neither, except in the simple comprehension section. Similarly, there is a small nonsignificant association between the scores and the learners' accessibility to transport.

Mass Media

Those who had a working radio did perform better than those who did not; and there were some apparent relationships with the type of programs preferred. Those who listened to discussion programs did better on the numeracy and complex comprehension questions than those listening to family life programs, although the reverse was true on the writing section.

Using Literacy Skills

There is an association between the scores on the tests and the frequency of using the literacy and numeracy skills (see Table 6.16) that is especially marked for using reading and writing skills and numeracy, but less so for the comprehension and writing sections of the test; the use of calculation skills appears to be almost irrelevant to performance on any section. Overall, however, the differences are only small and, once again, this cannot be the explanation for the large differences between the scores in the different districts.

Table 6.15: Mean Scores by Frequency of Using Literacy Skills

	N	Simple comprehension	Numeracy	Complex comprehension	Writing (attempts only)	Writing (everyone)
Comparator	751	93.9	66.6	49.5	52.3	39.3
Read this week	326	96.1	71.8	58.3	53.6	43.9
Did not read in last month	85	94.0	67.7	49.4	49.9	32.3
Wrote this week	311	96.2	74.6	60.0	52.1	44.1
Did not write in last month	117	96.1	66.0	54.3	52.8	38.5
Calculated this week	284	96.7	74.4	58.5	52.2	42.8
Did not calculate in last month	111	96.2	73.7	59.5	58.2	42.6

Comparison with Control Group Primary School Pupils from Grades 3 and 4

The discussion so far has limited itself to comparing the performances of different groups of sampled graduates. Now it turns to comparing the graduates with pupils in primary schools, namely Grades 3 and 4. The mean scores for the primary school pupils who were tested are shown in Table 6.16, along with the mean scores for the whole graduate sample and the mean scores of the two subgroups, whose scores tended to be lower—that is, the graduates who had never been to school and the graduates who were aged more than 50 years. Note that one would not expect that school pupils would do very well on the more complex comprehension questions, as those were clearly oriented toward adults; and even the writing tasks were more adult oriented. Focusing only on the simple comprehension questions and the numeracy questions, it can be seen that the P4 students nearly always do better than the P3 students (thankfully!), but that even the P4 students surpass the previously nonliterate graduates only in writing. We have to conclude that, under the conditions prevailing in the eight districts of Uganda, adults can learn the skills of literacy rather faster and more effectively than children aged between 10 and 15 years.

Given that the overall sample performs better on this test than an apparently reasonable control group, one could argue that a significant positive outcome of the programs has been demonstrated and move on. However, apart from the obvious point that we should have tested P5 children, it remains important to understand what affects performance on the test, and whether any of those influencing factors are amenable to policy intervention. In particular, there are quite large variations between the districts so that, for example, if all those in Arua had performed as well as those in Hoima, then the overall pass rate would have been much higher. A priori, one supposes that these differences are due to the way in which the program has been implemented in the different localities—but the question arises as to whether some of these variations can be explained in terms of the characteristics of the individual participants.

Table 6.16: Mean Scores for Primary School Pupils Compared with Graduate Groups

Group	Simple comprehension	Numeracy	Complex comprehension	Writing (attempts only)	Writing (everyone)
All P3	53.1	42.8	11.3	38.9	34.3
All P4	64.6	43.4	15.5	52.4	36.0
All literacy grads.	93.9	66.6	49.5	52.3	39.3
Literacy grads. with no school	84.9	47.8	31.8	46.5	—
Literacy grads. aged 50+	90.5	50.7	42.2	51.6	34.8

Which Are the Most Important Factors?

Multivariate Analysis

It is obviously an important question whether the better performance of respondents in one district, rather than another, should be attributed to the total environment of that district (including the implementation of the programs), or whether characteristics of the learners or, indeed, of their own class experience in the literacy programs have an important effect. While these kinds of hypotheses can only really be tested with a longitudinal study, rather than the kind of data collected here, it is worthwhile to use a multivariate framework to examine the comparative effects of learner characteristics, their class experience, and district (which has to include both the socioeconomic conditions and the way in which the program is implemented) upon the scores in the different sections. The following paragraphs report the results of an effort to do this.

The *dependent* variables are the separate test scores on the four sections: simple comprehension, numeracy, complex comprehension, and writing.

The *independent* variables are:

District. Eight new variables are created, one for each district indicating whether or not the individual respondent is in the district, to represent the effect both of overall socioeconomic conditions and of the way in which the program is implemented. In the analysis, only seven of these can be used as they are inter-dependent.

Learner Characteristics:

- Age: a three-level variable (under 30, 30–44, 45+)
- Gender: a two-level variable representing men and women (M, F)
- Living environment: an index (SEINDEX1) of housing conditions, which ranges from zero to six as defined in Chapter 4
- Literacy environment: an index (LITENVIN) as defined in Chapter 4

- Primary school: whether or not respondent attended primary school and for how long (RSCHOLIN), taking the values 0 for those with no primary schooling, 1 for those with one or two years, 2 for those with three or four years, 3 for those with five or six years, and 4 for those with seven or eight years, respectively
- Language facility: a constructed score measuring their facility at languages
- Frequency of using different skills: reading books, reading magazines, writing of some kind, mental and written calculations.

Literacy Programs:

- How long literate: a two-level variable (just literate, two-years literate)
- Exposure to literacy classes: one, two, three, or four years
- Type of programs: FAL, REFLECT, SCF, or WEP.

As the distribution of the scores is typically bell shaped, the dependent variable has been treated throughout as an interval score. Only the graduates sampled are included in these analyses, as they were the only ones who took the test, and it would not have been sensible to include the primary school children in the same analysis because the influencing factors would not be the same.

The meaning of the various columns and rows is as follows:

- The positive coefficients mean that this factor has a positive effect on the score for this dependent variable, and the higher the coefficients, the larger the effect.
- The effects for districts are all relative to Soroti, which is treated as having a neutral (zero) effect, so that the coefficients for the district variables, which are all positive, mean that they are performing that much better than the sample in Soroti.
- The cumulative proportion of variance refers to the extent to which the factors entered into the regression equation actually account for the variations in the index scores between the individual respondents. It will be noted that all the variables account for only very small proportions of the variance—at most, 10 percent—between the graduates' performances.

The district is a determinant for all three scores. For example, it is noticeable that several districts are significantly different from the base district (Soroti) for the complex comprehension score and all the districts always have a positive coefficient for each of the three test scores. Moreover, in relative terms, district coefficients account for a substantial proportion of the total variance accounted for.

A similar analysis has been carried out distinguishing between the 19 subcounties where fieldwork was carried out. The estimated coefficients and standard errors for the learners' and programs' characteristics are very similar. On balance, about half of the interdistrict variation can be ascribed to variation between the subcounties within the districts, but the overall conclusion is the same: that there are substantial variations between localities. These could be associated with variations in socioeconomic conditions that we have not measured, but they are more likely to be associated with the way the programs have been implemented in the different localities.

Table 6.17: Multivariate Analysis of The Three Test Scores

	Numeracy	Comprehension	Writing
(A) Beta coefficients and their standard errors			
Apac	.16	.21	.01
Arua	.04	.21*	.10
Bushenyi	.22	.54*	.10
Hoima	.30	.41*	.14
Iganga	.26	.48*	.05
Mubende	.13	.27	.00
Rukungiri	.39	.62*	.24
Gvt. (1), NGO (2)	.26	.40	.01
Sex	–.09*	–.05	–.06
Age	–.05	–.07	–.01
Could write name	.06	.04	.04
Just (1), 2-years (2)	–.02	–.07	–.06
More primary	.31**	.26**	.20**
Better S.E.S.	–.04	.04	.02
More classes	.04	.12*	–.01
(B) Cumulative proportion of variance accounted for			
Between districts	.016	.017	.036
Learner factors	.098	.083	.055

* statistically significant at the 10 percent level; ** statistically significant at the 1 percent level.

The type of programs, FAL or NGO, was expected to affect performance. The analysis in Table 6.17 shows that the coefficient for this is always positive but never statistically significant. A similar regression analysis carried out only for the districts of Apac and Mubende (the only districts where FAL and REFLECT can be compared) shows that the effect is indeed not statistically significant and the coefficient on primary schooling is much higher, which reinforces the observations made above on the basis of the cross-tabulations.

Table 6.18: Multivariate Analysis of the Three Test Scores in Apac and Mubende

Variable	Numeracy	Comprehension	Writing
Mubende	–.08	.01	–.02
FAL (1), REFL (2)	.03	.10	–.05

In terms of individual learner factors, the only strong consistent finding is the importance of primary schooling, which makes a difference of a quarter of a standard deviation in all three scores. Exposure to the literacy classes always has a positive coefficient but is significant only with the comprehension score. A better socioeconomic index always has a positive coefficient but is never statistically significant. The variables reflecting the frequency of using skills made hardly any difference.

Literacy Performance and "Functional" Knowledge, Attitudes, and Practices

At this point, we anticipate a later section of this chapter by introducing the scores of the graduates on assessments of their "functional" knowledge, their attitudes, and their reported practices. The intent is to assess whether such variables influence performance in literacy skills. When these scores are included, they do indeed make a difference: the higher the score on functional knowledge, the higher the score on numeracy and comprehension; the more "modern" the attitude score, the higher the scores on the comprehension test; and the more "modern" the practice score, the higher the score on the numeracy test. In each case, they also increase substantially the proportion of variance accounted for (by 4.0 percent, 4.5 percent, and 1.8 percent, respectively). However, as it is unclear whether attitudes influence or are influenced by literacy and literacy achievement, these findings have not been explored in detail.

Functionality Attainments

Measuring Knowledge, Attitudes, and Practices

As the previous paragraph recalled, FAL and other literacy programs were not concerned with literacy as an end in itself, but as a means to enable their learners to start acquiring and using useful or "functional" information that would widen their awareness of factors that affected the quality of their lives, lead them to modify their beliefs and attitudes, and finally adopt behaviors that would improve the quality of their lives. Therefore, the evaluation posed questions to assess the extent to which the primers and instructors had enabled the graduates to master the knowledge, as well as the extent to which the knowledge had led to modified attitudes and behaviors. The control group for this part of the evaluation comprised the invited sample of 170 nonliterate persons, a quarter of whom had actually been to primary school.[18]

Thirteen "knowledge" questions were asked, as detailed in Table 6.19. On attitudes, the respondents were asked whether they agreed with 18 specific statements that appear in Table 6.21. With so few items, one cannot presume to build a valid attitude scale. Nevertheless, the responses provided a rough idea of graduates' and nonliterates' views about some of the messages contained in the literacy primers. Finally, on behaviors, learners were asked about 19 practices discussed in the primers and facilitators' guides—the questions are detailed in Table 6.24. Admittedly, for obvious reasons, this was a crude and possibly unreliable way of measuring behavior, but it was the only option feasible within the time frame available for implementing the evaluation. The full text of all the questions is shown in Annex 3 in Okech et al. (1999).

[18] A possibly more satisfactory alternative for a control group would have been a sample of learners who had just begun their classes. That option was not feasible, as classes open at different times in the eight districts.

Functional Knowledge

Table 6.19, on knowledge, divides the graduate sample into those who had just graduated and those who had graduated two years previously. The purpose is to test whether the lapse of time leaves the level of knowledge unchanged, increased, or reduced. Both groups of graduates are compared with the sample of nonliterates. On 11 of the 13 questions, the new graduates outscore the two-year graduates. However, on only two questions is the difference as wide as five percentage points or more. Similarly, on the two questions on which the two-year literates outscore the new literates, the differences are only two and three percentage points. It would appear that time does not necessarily erode knowledge.

Table 6.19: Percentages by Group Correctly Answering Functional Knowledge Questions

Question	2-year literates	Just literates	Nonliterates	All groups	95% CI
Which of the following foods gives energy to the body? (maize)	35	40	27	36	25–47
Which of the following protects the body from disease? (vegetables)	48	51	46	48	37–59
Which one of the following diseases is brought by flies? (diarrhea)	94	92	77	90	
What disease can you not protect by vaccination? (diarrhea)	55	57	37	53	
What disease can you catch through not washing your hands? (diarrhea)	93	94	78	91	84–98
Can someone have HIV/AIDS without showing symptoms? (yes)	68	78	54	70	59–81
When living with someone with HIV/AIDS should you take precautions? (yes)	64	66	33	60	49–71
What are the major reasons for planning a family?	90	87	64	87	79–94
What are the major advantages of breast feeding?	87	88	70	84	76–92
How often do we vote for the president? (every five years)	76	79	56	74	64–84
How many people are on the LCI executive? (10)	26	30	13	25	15–35
What else, apart from fertilizer, can you use?	57	56	52	56	45–67
How can you fight pests?	64	60	71	64	53–75

Note: In the following tabulations, respondents who gave several answers, whether or not that included the correct one, are treated as having given the wrong answer.

In contrast, the nonliterate group outscored the graduates on only one question—on how to combat pests—and by a margin of seven percentage points. On the other 12, the graduates

outscored the nonliterates by margins ranging from two to 31 percentage points. In more detail, the margins, measured between the lower of the graduate scores and the nonliterate scores, were:

- Less than 5 percentage points: two questions
- Between 5 and 10 percentage points: two questions
- Between 11 and 15 percentage points: four questions
- 16 or more percentage points: four questions.

It would appear that most graduates have indeed learned more than the nonliterates. From the perspective of a program designer, however, two observations are necessary. First, on 6 of the 13 questions, a third or more of the graduates were unable to give the correct answer. More effective content and pedagogy seem to be required. Second, on 8 of the 13 questions, more than half the nonliterate sample was able to give the correct answer. That raises the question whether the designers are teaching the learners what the majority of them already know—a cardinal sin for an adult educator.

To analyze the performance of the district subsamples, we first removed the three questions on which 90 percent or more of the sample gave correct answers, then looked at the proportions in each district who gave correct answers to the remaining 10 questions. The mean score for the whole sample is 5.8, with a relatively small variation between districts from 4.7 in Apac to 6.5 in Rukungiri. If we take 5.0 (50 percent) as a minimally acceptable score, we see that almost four-fifths of the sample attained it. If we take 7.0 (70 percent) as the score that should have been attained by most of the graduates, we see that only 38 percent could satisfy that criterion. There is clearly room for improvement at both ends of the scale. The full distribution is shown in the following table and confirms the earlier commentary about the relative performance of Apac as compared with Mubende.

Table 6.20: Knowledge: Percentages of District Samples Answering Correctly Fewer than Half and More than Seven of 10 Questions

Category	Ap	Ar	Bu	Ho	Ig	Mu	Ru	So	All	CI
N	79	73	125	96	110	93	121	96	793	.
% less than 5 (50%) correct	47	11	26	20	39	15	11	20	22	13–31
% more than 7 (79%) correct	13	45	42	34	22	49	58	33	38	30–46

We tested whether the variables of age and gender had any influence on the knowledge scores, but found only small and statistically insignificant differences.

Further, the differences between the samples in FAL and REFLECT programs in Apac and Mubende have been examined, and, while some are striking, they are not all in the same direction. In comparison with each other then, neither program seems to have a systematic overall advantage (see Chapter 6.1.5–6.1.8 in Okech et al. 1999).

The fact that for a majority of questions—8 of 13—more than half the nonliterate sample could answer correctly suggests that even remote rural communities in Uganda do have opportunities to acquire useful, "modern" knowledge and might then be developing modern attitudes and practices independently of any literacy programs. Thus, literacy programs can be considered only

one among a number of modernizing influences. Nonetheless, Uganda's literacy programs clearly act as an additional reinforcement and possibly even an accelerator of development.

Attitudes

The possibility of a "cardinal sin" on the part of the program designers appears again in the enquiry on attitudes. On no fewer than 15 of the 18 questions asked (83.3 percent), more than half the nonliterate sample gave the "modern" response (see Table 6.21). Indeed, on seven of them, 80 percent or more proved to be modern—or at least to know what the modern answer was—without the benefit of participation in a literacy program. That said, on all 18 items fewer nonliterates than graduates gave the modern response, and on 12 of the items (67 percent), the margin of difference was greater than five percentage points. A similar interval scale as used for knowledge shows in more detail what the margins, measured between the lower of the graduate scores and the nonliterate scores, were on modern attitudes.

- Less than five percentage points: five questions
- Between five and 10 percentage points: nine questions
- Between 11 and 15 percentage points: three questions
- Sixteen or more percentage points: one question.

Table 6.21: Percentages by Group Giving Modern Answers to Attitude Questions

	2-years literates	Just literates	Illit-erates	All	95% CI
You should not plan as number of children are a gift from God. (disagree)	76	71	55	70	63–77
Fruits are only for children. (disagree)	91	84	82	87	82–92
Education no longer pays. (disagree)	97	96	88	95	92–98
A man has the right to beat up a woman if she doesn't obey him. (disagree)	63	61	49	60	53–67
It is more useful for boys to go to school than girls. (disagree)	82	83	75	81	75–87
Men and women should share equally in looking after children. (agree)	92	93	84	91	87–95
Women make as good village leaders as men. (agree)	87	90	84	88	83–93
It is all right to drink as much as you like if you have the money. (disagree)	88	86	80	86	81–91
If someone is arrested the police can beat him up as punishment. (disagree)	50	55	38	50	42–58
Because they are not paid, it is okay for LCI members to take bribes. (disagree)	76	74	73	75	68–82
It is okay to bribe an LC member to get what you want. (disagree)	80	76	68	76	70–82

(Table 6.21 continues on the following page.)

	2-years literates	Just literates	Illiterates	All	95% CI
Paying bride wealth maintains family unity. (disagree)	30	34	23	31	24–38
It is not necessary to use latrines as our forefathers never used latrines, yet they lived for a long time. (disagree)	95	92	90	93	89–97
Breastfeeding is better than bottle feeding. (agree)	90	89	77	89	84–94
If a woman earns money, she should give most of it to her husband. (disagree)	67	74	64	70	63–77
The best way for us to benefit is to work together rather than in competition. (agree)	92	91	90	91	87–95
People shouldn't help people with AIDS because they are going to die anyway. (disagree)	90	89	79	88	83–93
With 500/- left over, which would you buy? (tree seedling)	73	81	66	75	68–82

Table 6.22 displays the patterns of differences on the two dimensions between the graduates and the nonliterates and suggests that, while the graduates have more modern knowledge, they are closer to the nonliterates in terms of attitudes. What might be countering the influence of knowledge are cultural conditions, illustrated by the following statement from a female participant in the programs:

> *When I tell my husband that we should start family planning methods, he tells me off. And he says that he has to get all the children he wants, even if it is not from me. He is ready to get as many children from other women. He says that he will be getting children until AIDs kills him.* [focus group discussion, Madudu, Mubende]

Interestingly, the statements for which there were *not* marked differences in attitudes between the answers from the nonliterates and the graduates, were:

- "Fruits are only for children," which suggests widespread changes from what were the traditional dietary views
- "It is more useful for boys to go to school than girls," which suggests that the government's efforts to emphasize the importance of educating girls is effective
- "Women make as good village leaders as men" and "if a woman earns money, she should give most of it to her husband," which suggests that patriarchal attitudes are diminishing
- "It is okay for LCI members to take bribes," which suggests that anticorruption efforts may be succeeding.

Table 6.22: Comparison of Intervals of Difference in Scores on Knowledge and Modern Attitudes between Graduates and Nonliterates

Percentage difference in scores	Knowledge questions (12) (%)	Modern attitude questions (18) (%)
Less than 5 percentage points	2 (16.7)	5 (27.7)
5 to 10 percentage points	2 (16.7)	8 (44.4)
11 to 15 percentage points	4 (33.3)	3 (16.7)
16 or more percentage points	4 (33.3)	2 (12 .4)

Each of these topics is covered in the primers and REFLECT training manuals, but they are also discussed in other campaigns (e.g., RUWASA) and over the radio. This observation of course emphasizes the earlier point about the several forces promoting modernization quite independently of the literacy programs.

Question 12, where again the difference between the graduates and nonliterates is not marked, notes a striking exception to the majorities of the graduates who give modern answers to 17 of the 18 questions posed: only 30 and 34 percent, respectively, of the two-year and new graduates, respectively, gave the modern answer, along with 23 percent of the nonliterates. The question concerns bride wealth and its role in holding families together. The modern view, propagated by the primers, is that bride wealth, whatever its role in promoting good relations between families and keeping husbands and wives in a union, also tends to subjugate women, institutionalizing their status as the property of their husbands and families, and is therefore to be discouraged. Clearly, the primers have failed to persuade a large majority of the graduates, which suggests that learners in literacy classes are capable of maintaining views they hold strongly and that they probably draw reinforcement from their communities and possibly even from their instructors.

To inspect the differences between the eight districts on modern attitudes, Table 6.23 treats attitudes in the way Table 6.21 treated knowledge. It removes the five statements on which there was more than 90 percent agreement, leaving 13 statements for analysis. It once again takes half as a minimally acceptable proportion for the "correct" answer, but applies a rather stricter criterion for the desired proportion of correct answers: 11 of 13, 84.6 percent, rather than the 70 percent required for knowledge. The mean score is quite high at 9.6 (73.8 percent), but the variations between districts are more substantial than they are with knowledge: from 7.2 (55.4 percent) in Apac to 12.0 (92.3 percent) in Mubende.

Overall, the table suggests that Mubende and Hoima are a good deal more modern in outlook than the other districts, especially Apac, while Arua appears less modern than might be expected of an urban and periurban center. In fact, Mubende scored highest on 11 of the 18 items. One possible reason for this may be that REFLECT uses a participatory approach, which places emphasis on creation of awareness and attitude change. The other reason may be that, situated close to Kampala, it gives its learners easier access to information and more exposure to modern media such as television, videos, and a variety of radio stations. Hoima, on the other hand, also close to Kampala but with a poorer road network and with no TV station and limited access to the different FM radio stations, did not score as highly; and the learner sample in Soroti had very limited access to radio (see

Chapter 4). Interestingly, Rukungiri, which scored highest on all the literacy tests, ranks only fourth in "modernity" as measured here.

Table 6.23: Modern Attitudes: Percentages of District Samples Giving Fewer than Half or 11 and More Modern Answers out of 13 Questions

Category	Ap 79	Ar 73	Bu 125	Ho 96	Ig 110	Mu 93	Ru 121	So 96	All 793	CI
% fewer than half modern responses	44	4	20	3	7	0	10	28	14	4–24
% giving 11 or more modern responses out of 13	9	29	24	68	50	89	43	25	43	30–50

The differences between the samples in FAL and REFLECT programs in Apac and Mubende have also been examined and, as with the knowledge scores, while there are some striking differences, they are not all in the same direction, so that no conclusion can be drawn (see Tables 6.11–6.19 in Okech et al. 1999). While the graduates from REFLECT Mubende scored strongly, those from REFLECT Apac scored low on almost all items. The differences might be explained by the quality of the instructors/facilitators. Those in REFLECT Mubende had received longer training in the use of participatory methods, while those in Apac had effectively operated for less than one year. Contributory factors could be that Apac is more rural and its distance from national capital is much greater, which limits access to modern media and urban influence. There is less community interaction with modern ideas, hence the more conservative attitudes and opinions expressed. The Apac sample from REFLECT was also much smaller (24 persons) than that from FAL (64 persons).

Practices

The next issue to be considered is the extent to which modern attitudes are translated into modern practices. The limitations of using interviews and questions to measure attitudes and practices are recognized. At this point, a further limitation calls for attention. Ideally, the questions on attitudes and practices should have been framed in a close correspondence, so that some check might have been maintained on the consistency of the responses. As it stands, only 5 of the 18 questions on attitude have clearly direct counterparts among the 19 questions on practices, so that the scope for checking consistency is limited. Nonetheless, a check is attempted below, after a discussion of the data on practices in Table 6.24.

Table 6.24: Percentages Giving the Modern Answer to Functional Practice Questions

Questions	2-years literate	Just literate	Illiterates	All groups	95% CI
Did you eat fruit last week?	96	95	80	92	88–96
Do you keep records?	61	63	14	54	46–62
Do you rotate your crops?	97	96	84	94	90–98
Do you use fertilizer?	73	69	41	65	58–72
Do you use seeds?	62	60	47	59	52–66
Do you have any income you can use yourself? (woman only)	72	66	57	67	60–74
Who usually takes the children to the hospital? (both equally)	22	23	20	22	17–27
Who does the planting and weeding?	40	26	31	33	26–40
Who does the marketing of food crops?	17	21	7	17	11–23
Who does the marketing of cash crops?	19	20	12	18	12–24
Who does the marketing of animals?	19	17	13	17	11–23
Who usually fetches the water, the man or the woman? (M+W, .B+G)	35	28	24	30	23–37
Who usually fetches firewood, the man or the woman? (M+W, .B+G)	29	21	16	23	17–29
Do you practice family planning? (only for fertile-age women [N=640])	39	47	15	40	33–47
Are you a member of any social group or association?	69	50	25	53	45–61
Did you take part in the last parliamentary election?	89	83	82	85	80–90
Did you take part in the last Local Council elections?	91	[illegible]	79	88	83–93
Proportion attending 2 or 3 of the last 3 council meetings	58	52	32	51	49–65
If yes, did you ask any questions or say anything at all?	62	52	31	53	59–73

Except for the item on planting and weeding—question 8—(where the nonliterates were more modern than the new graduates!), the nonliterates tended to give the traditional answer more often than graduates. The detailed differences between the graduates and nonliterates on 14 questions are:

- Less than five percentage points: three questions
- Between five and 10 percentage points: three questions
- Between 11 and 15 percentage points: four questions
- Sixteen or more percentage points: five questions.

Table 6.25 shows the comparison of the pattern of differences for practice with the patterns on knowledge and attitudes. It appears to suggest that the graduates tend to have more modern knowledge and to be more modern in their practices, even if they seem to be closer to the nonliterates in their attitudes. However, the limited correspondence between the questionnaires on attitudes and practices makes it likely that the two instruments were simply measuring different areas of value and behavior, so that to expect a correlation between responses would be unrealistic.

Table 6.25: Comparison of Intervals of Difference in Scores on Knowledge, Modern Attitudes, and Modern Practices between Graduates and Nonliterates

Percentage difference in scores	Knowledge questions (12) (%)	Modern attitude questions (18) (%)	Modern practice questions (14) (%)
Less than 5 percentage points	2 (16.7)	5 (27.7)	3 (21.4)
5 to 10 percentage points	2 (16.7)	8 (44.4)	3 (21.4)
11 to 15 percentage points	4 (33.3)	3 (16.7)	3 (21.4)
16 or more percentage points	4 (33.3)	2 (12 .4)	5 (35.7)

To obtain a closer assessment of the correspondence between attitude and behavior, Table 6.26 takes the five attitude questions that have some point of correspondence in the practice questions and compares the consistency of the three groups.

On the dietary question, reported practice concords with reported attitude—and even exceeds it! On women's ownership of money, the discrepancy between attitude and practice is not wide. On the other three points—family planning, equal family responsibilities, benefits of cooperation—practice appears a long way behind attitudes. Nevertheless, even though the graduates are at the same level as the nonliterates in sharing family responsibilities, they do outdo them in both attitudes and practices in family planning and joining associations to promote cooperation.

Even with the associations, however, some caution is needed in interpreting the data. There were substantial variations between districts/subcounties, from only 27 percent of the graduates in Mubende joining an association to 95 percent in Rukungiri. But in the latter, the FAL programs had been introduced into existing women's groups, and so had not been the engine of change in this particular respect.

Table 6.26: Modern Responses on Attitudes Compared with Modern Responses on Practices

Questions	2-year graduates % modern responses	New graduates % modern responses	Nonliterate % modern responses
Attitude question 1: You should not plan your family, as children are a gift from God. // Practice question 14: Do you practice family planning?	76 39 diff. –37	71 47 diff. –24	55 15 diff. –40
Attitude question 2: Fruits are only for children. // Practice question 1: Did you eat fruit last week?	91 96 diff. +5	84 95 diff. +11	82 80 diff. –2
Attitude question 6: Men and women should share equally in looking after children. // Practice question 7: Who usually takes the children to hospital?	92 22 diff. –70	93 23 diff. –70	84 20 diff. –64
Attitude question 15: If a woman earns money, she should give most of it to her husband. // Practice question 6: (put only to women): Do you have any income you can use yourself?	67 72 diff. +5	74 66 diff. –8	64 57 diff. –7
Attitude question 16: The best way for us to benefit is to work together rather than in competition. // Practice question 15: Are you a member of any social group or association?	92 69 diff. –23	91 50 diff. –41	90 25 diff. –65

To examine the differences between the eight districts, the table below repeats for practices what was done above for knowledge and attitudes. It removed the two items on which more than 90 percent of the graduates gave the "correct" answer, collapsed the three items on marketing into one, and the two items on domestic chores into one, leaving 14 items for examination. The criterion for "minimally acceptable" remains at 50.0 percent, but the criterion for "desirable" is set at 10 out of 14 (71.4 percent), closer to the criterion for knowledge and less exacting than the criterion for attitudes. At 7.3 (52.1 percent), the mean score barely exceeds the minimally acceptable level of 50 percent, while the variation between the districts is relatively low, with 5.8 (41.4 percent) in Apac and 8.4 (60.0 percent) in Rukungiri. In no district does even a quarter of the graduates satisfy the "desirable" criterion. Clearly, actual practices change at rather slower rates than knowledge and attitudes.

Table 6.27: Practices: Percentages of District Samples Giving Fewer Than Half or More Than 10 out of 14 Correct Answers

Percentage modern practices	Ap 79	Ar 73	Bu 125	Ho 96	Ig 110	Mu 93	Ru 121	So 96	All 793	95% CI
% fewer than half	54	52	22	42	36	34	12	32	34	23–45
% giving 10 or more	6	14	14	23	15	24	22	13	17	9–26

Indices of Variation in Knowledge, Attitudes, and Practices among Districts

To facilitate further examination of differences between the districts on knowledge, attitudes, and practices, a very simple index has been computed for each of the three dimensions. First, the items on which there was nearly full agreement were removed. That left 10 items in the knowledge section, 13 items in the attitude section, and 14 items for practices.[19] The next step computed for each district the average number of "correct" answers per graduate and used that as the index. For knowledge, then, the raw index runs from 0 to 10; for attitudes, from 0 to 13; and for practices, from 0 to 14. For easier comparison, Table 6.28 now presents the results as percentages of the maximum of each index. Its main signals confirm the variability between the districts, especially on attitudes, where the range is as wide as 36.9 percentage points, although for knowledge and practices, the differences are less dramatic at less than 20 percentage points. Nonetheless, three districts, Bushenyi, Hoima, and Soroti, rank equally—third—on knowledge, while the difference between the two top districts, Rukungiri and Mubende, is only two percentage points. Similar bunching occurs with practices. To observe whether the districts perform consistently relative to each other, Table 6.29 sets out the rank of each district on each index, as was done for the district scores on the tests of literacy skills.

Table 6.28: Index Scores on Knowledge, Attitudes, and Practices by District

District	N	Knowledge (as % of max. 10)	Attitudes (as % of max. 13)	Practices (as % of max. 14)
Apac	101	46.6	55.0	41.4
Arua	95	62.2	71.2	46.6
Bushenyi	144	58.1	67.1	56.3
Hoima	120	57.9	82.9	52.4
Iganga	136	53.0	72.3	50.1
Mubende	117	62.7	92.5	53.3
Rukungiri	146	65.5	75.0	59.9
Soroti	101	58.3	61.1	52.3
All districts	960	58.3	73.5	52.3
Range		46.6–65.5%	55.0–92.5%	41.4–59.9%

[19] In the practices section, questions 9, 10, and 11 on marketing were collapsed into one, as subjects were closely germane to each other and the scores on each were also very close.

Table 6.29: Rankings of Districts by Index Scores on Knowledge, Attitudes, Practices, and Literacy Skills

District	N	Rank on knowledge	Rank on attitudes	Rank on practices	Average rank on literacy skills
Apac	101	8	8	8	5.25
Arua	95	3	5	6	7.75
Bushenyi	144	4	6	2	6.5
Hoima	120	4	2	5	2.5
Iganga	136	7	3	7	5.0
Mubende	117	2	1	3	3.0
Rukungiri	146	1	4	1	1.0
Soroti	101	4	7	3	4.5

This tabulation of ranks suggests that, while there appears to be a fair degree of consistency between knowledge, practices, and literacy skills, there is no such consistency with stated attitudes.

Other Possible Sources of Variability in Scores

As previously, we tested for variability by age, socioeconomic conditions, experience of primary school, previous attendance at literacy classes, literacy environment, investments in literacy materials, and reported practice of literacy skills, but found no significant relationships.

Finally, to fulfil one of the objectives of the evaluation, we tested for differences between graduates from FAL and those from REFLECT in Apac and Mubende. The findings were inconsistent, as Table 6.30 shows. In Apac, the REFLECT participants obtained a slightly better score than FAL participants on the knowledge test and had more modern attitudes; there was no difference in respect of modern practices. In Mubende, the situation was reversed: REFLECT graduates scored slightly better on the modern practices scale, but slightly worse than the FAL participants on the knowledge and attitude scales.

Table 6.30: Means of Functional Scores According to Type of Program in Apac and Mubende

District	Type of program	N	Knowledge	Attitudes	Practices
1. Apac	FAL	53	4.3	6.8	5.8
	REFLECT	26	5.3	8.1	5.7
2. Mubende	FAL	16	6.3	12.3	6.7
	REFLECT	80	6.2	12.0	7.6

Correlations between Knowledge, Attitudes, and Practices

As the previous tables will have suggested, the correlation between knowledge, attitudes, and practices is not strong. The knowledge score is correlated 0.33 and 0.35 with the attitudes and practices scores, respectively, while the correlation between attitudes and practices is 0.25. These coefficients are not high, but they are statistically significant, although they should be treated with

caution, as the indices have been constructed from disparate questions. If one calculates a partial correlation controlling for district, which we have shown makes a large difference especially to the attitude scores, then the correlations are reduced, but not substantially.

Which Factors Affect Performance on the Knowledge, Attitudes, and Practices (KAP) Scales?

A variety of characteristics and conditions, which might affect knowledge, attitudes, and practices, have been considered in the previous chapters. It is obviously an important question as to whether the better performance of respondents in one district, rather than another, should be attributed to the total environment of that district (including the implementation of the programs), or whether characteristics of the learners or, indeed, of their own class experience in the literacy programs,[20] have an important effect. While these kinds of hypotheses can be properly tested only with a longitudinal study, it is worthwhile to examine the comparative effect of learner characteristics, their class experience, and district (which has to include both the socioeconomic conditions and the way in which the program is implemented) upon the various derived indices in a multivariate framework.

Three separate *dependent variables* are considered:

- *Functional knowledge*, measured by the index as defined above (FK) and by a weighted sum of the answers to the same questions (FK1)
- *Functional attitudes*, measured by the index as defined above (FA) and by a weighted sum of the answers to the same questions (FA1)
- *Functional practices*, measured by the index as defined above (FP) and by a weighted sum of the answers to the same questions (FP1).

The dependent variables are, of course, interrelated: indeed, some would say that they were causally related: Knowledge→Attitudes→Practices. Empirically, however, although the variables are associated, the statistical associations are not substantial, sharing at most 10 percent common variance. As detailed previously, the independent variables are district learner characteristics and literacy programs characteristics.

Separate regression analyses have been carried out for the full index scores and with restricted index scores,[21] and also for the first principal component of a factor analysis of each of the scores. Given that the results were very similar, we have preferred to present the results with the simplest scores: the full index scores. As the distribution of the scores is typically bell shaped, the dependent variable has been treated throughout as an interval score. Only graduates are included in these analyses. The meaning of the various columns and rows are as before.

The analyses presented in Table 6.31 show that location is the most important determinant. After controlling for the individual characteristics of the learners and their participation in the programs, this analysis shows that, relative to the Soroti sample, there are no statistically significant differences between the districts in performance on the knowledge score, but that there are some statistically significant differences between the districts on both the attitudes and

[20] This observation again highlights the unfortunate inability of the evaluation to associate more than a limited number of graduates with their instructors.

[21] As with the indices, those items where nearly everyone gave the "correct" answer were removed, as were closely related questions on which approximately identical scores were obtained.

practices score, with the samples in Hoima and Mubende performing significantly better on both. The impact of district upon the attitude scores is particularly striking.

In terms of the learner characteristics, age and sex made no difference to the knowledge and attitude scores but were statistically significant with the practices score (with women getting lower scores and older people, higher scores). It is also important to note that prior primary schooling had no effect on the attitude and practice scores and was only significant with the knowledge score, while the reported frequency of reading was always statistically significant. Moreover, the constructed index of housing conditions is consistently significant. The only characteristics of the programs that made a difference were whether the learner had just graduated or graduated two years ago and length of exposure to literacy classes, but these appear to be acting in opposite directions and so are probably canceling each other out.

Several other individual-level variables were included at different points in the analysis—the index of literacy environment, religion, and variables representing the interaction between gender, living conditions, and primary school attendance—but there were no systematic effects. While each of the indices of modern attitudes and practices did appear in the equations for the other, the coefficients are not very large, and there is no significant interdependence with the functional knowledge items.

When the scores on the different sections of the test are included, they do indeed make a difference: the higher the score on the functional knowledge score, the higher the numeracy and comprehension tests; the more modern the attitudes, the higher the scores on the comprehension test; and the more modern the practices, the higher the score on the numeracy test. They also increase substantially the proportion of variance accounted for—4.0, 4.5, and 1.8 percent, respectively.

Table 6.31: Multivariate Analysis of the Scores for Knowledge, Attitudes, and Practices

	Knowledge	Attitudes	Practices
Apac	–.21	.03	.14
Arua	.03	.14*	.10
Bushenyi	–.01	.24	.63*
Hoima	–.17	.45*	.40*
Iganga	–.26	.28	.32
Mubende	–.01	.54*	.28*
Rukungiri	.08	.39	.73*
Gvt. (1), NGO (2)	–.08	.16	.44*
Sex	–.07	-.02	–.19**
Age	.07	.06	.12*
Could write name	.05	.06	–.01
Just (1), 2 years (2)	–.11*	.02	.03

(Table 6.31 continues on the following page.)

	Knowledge	Attitudes	Practices
More primary	.13*	.06	.00
Better S.E.S.	.15*	.10*	.12*
More classes	.11*	.07	
Frequency of reading	.07*	.07*	.15**
Cumulative proportion of variance accounted for			
Differences between districts	.068	.238	.058
Learner factors	.108	.248	.141
Test scores	.141	.277	.151
Additional significant variables			
	Numeracy	Comprehension	Numeracy
	Comprehension	Sentence word score	

* statistically significant at the 10 percent level, ** statistically significant at the 1 percent level.

The results of the multivariate analysis mirror closely those of the tabular analyses of the factors influencing the scores on the indices of functional knowledge, attitudes, and practices. Thus district is highly significant, primary school attendance is significant, and socioeconomic status (in terms of housing conditions) is just significant.

As before, a similar analysis was done for the 19 subcounties where fieldwork was carried out. The estimated coefficients and standard errors for the learner and programs characteristics are very similar. On balance, about half of the interdistrict variation can be ascribed to variation between the subcounties within the districts, but the overall conclusion is the same: there are substantial variations between localities. These could be associated with variations in socioeconomic conditions that we have not measured, but are more likely to be associated with the way the programs have been implemented in the different localities.

The coefficient for the type of programs (FAL versus NGOs) is statistically significant only with the practices score. A similar regression analysis carried out only for the districts of Apac and Mubende (the only districts where FAL and REFLECT can be compared) shows that the effect is insignificant and the coefficient on Mubende district much higher, which reinforces the observations made above on the basis of the cross-tabulations.

Table 6.32: Multivariate Analysis of the Three Test Scores in Apac and Mubende

Variable	Numeracy	Comprehension	Writing
Mubende	.41*	.64***	.17
FAL (1), REFL (2)	.03	.08	.09

One question of interest is whether or not there is any relation between these index scores on the indices of knowledge, attitudes, and practices and the scores on the comprehension, numeracy, and writing tests analyzed previously. While the correlations (in Table 6.33 below) are

statistically significant, and this remains true after controlling for district and other factors, thus confirming the observation that the *levels* of the correlations are surprisingly low. They suggest that the results on the literacy tests are almost independent of a person's level of knowledge, attitudes, and practices. While a positive relationship between the two dimensions might be posited theoretically, the empirical evidence here indicates only a tenuous association. This finding is important: there is no generalizable measure of functional adult literacy encompassing both "academic" and "functional" skills. The signal then is that program designers need to make explicit and separate provision for each domain.

Table 6.33: Correlations between Functional Scores and Test Scores

	Simple comprehension	Simple numeracy	Complex comprehension	Writing score (attempt)	Writing score (everyone)
Knowledge	.103	.201	.257	.085	.129
Attitudes	.105	.143	.244	.010	.084
Practices	.164	.200	.230	.064	.163

Summary

Academic Attainments

Because it was never agreed in the context of the FAL programs what constituted basic literacy competence, the only way to carry out a systematic evaluation was to design a special test that would be common and fair to all eight districts, as well as to the NGO programs, despite the necessity to appear in seven languages.

In relation to what the program designers believe can be accomplished under the conditions prevailing in Uganda and within about 300 hours of instruction, the average attainments of the genuinely illiterate learner fall short, except in the elementary level of simple comprehension. The average score for "complex comprehension" was only 40.8 percent, with very wide variability. In writing, even those who felt able to tackle the test scored on average less than 50 percent. The scores on numeracy averaged just below 60 percent, which is better, but still below what the designers felt was attainable. That said, the fact remains that the genuinely illiterate strongly outperformed primary school pupils, who had had three and four years of schooling. The signal is that, even if nonliterate adults do not master the skills of literacy as rapidly as the designers of literacy programs think they might, they do seem to learn those skills at a faster rate than primary school pupils in the same communities.

From the limited testing possible, it appears that adults who have graduated from a literacy programs do retain their literacy skills and accompanying knowledge for at least two years without deterioration. The testing was limited because a majority of the graduates sampled continued attending literacy classes for considerable periods. Taken with the fact that 73 percent of the sampled graduates had attended primary school, this finding suggests that there is a substantial demand for education in all parts of Uganda.

There are substantial variations in the test scores, not only by district, but also by exposure to primary school, length of literacy class exposure, and frequency of using skills. The district variations seem to be related to the amount of enthusiasm and support for the programs in the different districts. They also seem to be related to local socioeconomic conditions.

The variations according to other factors are all in the expected direction, but the relative strength of primary school attendance when young and (to a lesser extent) attendance at post-literacy classes when adult serves to remind us that, at least in "academic" terms, and despite the performance of the Grade 3 and 4 pupils on this special test, schooling is an effective instrument. Finally, while common sense might suggest that practicing literacy and numeracy skills is important to maintain and improve them, the reports of this sample suggest that practice did not make a substantial difference to the scores on the tests.

All these factors, potentially at least, overlap, and the multivariate analysis reported above is an attempt to sort out their relative effects. First, the lack of relation between the test results and the respondents' reported practicing of their reading, writing, and arithmetic skills is striking. There is a clear division between "academic" performance and substantive knowledge.

Second, it is clear that there are substantial differences between districts in the way the programs promote comprehension, especially when compared with the lack of significance of the district coefficients for the other two sections of the test. Third, the preeminence of primary school attendance over all other variables is striking. Although bivariate relations were observed between several other factors and the test scores, their apparent influence on other variables tended to evaporate in a multivariate context. The only other factors, which have a small effect additional to and independent of districts/subcounties and primary schooling, are the sex of the respondent for the numeracy score and exposure to literacy classes for the comprehension score. Altogether, these results confirm the importance of the way in which the programs are implemented in different localities.

Functional Knowledge, Modern Attitudes, and Modern Practices

On the functional knowledge questions, while everyone (except the nonliterates) knew who the president was and the frequency of elections, people were much less sure about health-related questions, with as little as a third being able to choose correctly which food gave energy out of a list of five items. The nonliterates scored substantially lower on nearly all these questions.

On the modern/traditional attitude questions, there is less difference between the nonliterates and the literates. Although there is systematic variation in the answers between districts/subcounties, there are no obvious individual characteristics that are associated with more modern answers.

It is interesting to note that where the questions went to the area of local culture and tradition, the modern response was nearly always rejected. But when the questions referred to issues introduced "from outside," such as attitudes to boy-girl preference for Western education and their usual practice in deciding about the disposal of (monetary) family income, communities appear to be quite prepared to adopt the modern practice in respect of this "foreign" institution. Indeed, the extent to which modern practices in these respects are adhered to is impressive.

Indices were constructed to facilitate later analyses. Interestingly, there was little relation between the scores on the three different KAP indices. Despite the theoretical presuppositions about the promoters of healthy behavior, the links between appropriate knowledge and the expression of modern attitudes and beliefs, or between modern attitudes and beliefs and the development of modern practices, appear not to be as automatic or clear as supposed.

Finally, a multivariate analysis was made of the factors affecting the various scores. Apart from district, which was always an important and very significant factor, the other main determinants

were the reported frequency of reading and the individual socioeconomic conditions. It is noticeable that, in contrast to the result with the test scores, primary school attendance only influences the knowledge score and then not much. The difference between the effects of district upon the modern attitudes and modern practices score is striking.

We have examined a variety of multivariate analyses: the major conclusion remains that the main determinant of the scores—and especially the attitude score—is differences between the districts. In principle, this might have been related to the variations in socioeconomic conditions between each district (see Annex 2 in Okech et al. 1999), but variables reflecting individual learner characteristics have been included in the equation. The variations observed must therefore be related to the way in which the programs have been implemented in the different districts, such as the availability of primers and materials. The quality of training and the extent of support and supervision for the instructors would seem to be the factors that would influence performance most, but that hypothesis could not be tested directly because of the nature of the sample of graduates. However, if the sample of instructors and facilitators is representative, and if their reports are accurate, the relatively equal performances of the graduates from FAL and those from the NGO programs provokes questions about just what makes for an effective instructor or facilitator.

CHAPTER 7: LITERACY USE AND BENEFITS

Chapter 6 analyzed the performances of the graduate sample and a sample of primary school pupils on a test of reading comprehension, writing, and calculation and on a test of the functional knowledge contained in the literacy primers and instructors' guides. It also analyzed what the graduates and the nonliterate control group reported about their attitudes and practices on a number of modern dimensions. This chapter moves the focus first to the practical questions of the uses to which the graduates actually put their skills and knowledge; then to the benefits they feel they have enjoyed from their courses, along with the benefits that their community leaders and instructors perceive they have enjoyed; and finally to a question that should interest decisionmakers: how do the graduates wish to take their education further?

Involvement in Projects and Income-Generating Activities

One of the intentions of FAL and the NGO literacy programs was to help their learners establish the usefulness of literacy and their new knowledge through combining instruction with actual applications to a range of activities. For this purpose, instructors were trained and encouraged to identify and, with their learners, initiate projects that could generate income. The evaluation therefore asked the invited sample of instructors/facilitators to specify up to six projects that they had instigated with their learners. Eighty-one of the 118 (68.6 percent) mentioned at least one kind of class project. (The corollary is that about one-third of the instructors had not undertaken to demonstrate and experience the uses of literacy with their learners.) In all, they named 189 different projects—or an average of more than two per instructor responding positively. The most frequently specified projects were growing crops/agriculture, vegetable gardens, handicrafts/weaving mats, animal husbandry, poultry keeping, brick making, and charcoal burning.[22]

When the sampled graduates were asked about the topic, 474 (59.8 percent) reported involvement in class projects and income-generating activities. This is 8.8 percent fewer than the instructors and, if the sample is representative, suggests that 40 percent of learners receive no help in integrating literacy into their daily activities. Altogether, the graduates mentioned 791 projects—an average of nearly two per respondent, which is consistent with the reports from the instructors. The class projects most often cited were crop production, handicrafts, animal husbandry, small business, horticulture, poultry farming, and community maintenance, again consistent with the instructors' reports. Discussions in groups gave a similar picture. The comparison of the projects cited by the instructors and by the participants is given in Table 7.1 below. Although it is not possible to match graduates with instructors, there is broad consistency between the reports from the two samples.

Two-thirds of the learners also agreed that they had generated income through these activities, although this proportion varied between 35 percent in Apac and 98 percent in Mubende. Similarly, about 66.7 percent said they had subsequently been involved in income-generating activities, and, among those who had participated in projects, 80 percent claimed that they had improved their lives as a result.

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[22] The interviews did not probe into how the instructors actually combined practice in these well-known and long-established occupations with practice in reading, writing, and calculating.

Table 7.1: Projects Cited By Instructors and by Participants

Types mentioned by instructors	No. of mentions	%	Types mentioned by graduates	No. of mentions	%
Growing crops/agriculture	48	25.4	Crop production	232	29.3
Vegetable gardens	20	10.6	Horticulture	51	6.4
Animal husbandry	16	8.4	Animal husbandry	91	11.5
Poultry keeping	11	5.8	Poultry keeping	45	5.7
Handicrafts/weaving mats	19	10.1	Handicrafts	129	16.3
Brick and charcoal making	11	5.8	Small business	76	9.6
			Community maintenance	45	5.7
Other	64	33.8	Other	122	15.4
	189			791	

FAL/NGO/REFLECT

A comparison between the government FAL programs and NGOs suggests four observations. First is the odd pattern reported by the graduates of FAL in Apac and Mubende and by the NGO graduates in all districts: although only half of them were involved in income-generating projects through their classes, two-thirds and more went on to undertake some form of income generation after their classes, while four-fifths and more claim to have improved their lives through such projects. We have no additional data to explain these patterns. Second is the usual difference between districts: for *class* projects, FAL in Apac and Mubende is well below the average for FAL in the other six districts, and somewhat below them for *subsequent involvement*—although it varies less in claiming an improved life. The third observation is that the NGOs clearly cannot be treated as a homogenous group: in class projects, REFLECT clearly outdistances the others, and its graduates' responses on subsequent involvement and improvements in life seem more consistent. The fourth observation is that, if anything, the *classes* in the government's programs have been more active in initiating income-generating projects than those facilitated by NGOs (other than REFLECT). Again, we have no data to elucidate the sources of this difference.

Table 7.2: Comparison of FAL and NGO Graduates' Involvement in Income-Generating Activities (Percentages Giving Positive Responses)

	Apac and Mubende		All districts	
	FAL N =	REFLECT N =	FAL N =	NGOs N =
Generated income through class projects	52.0	81.8	72.3	54.9
Subsequently involved in income generation	64.5	71.1	71.5	70.4
Improved life because of projects	85.7	83.6	89.8	80.1

While the researchers were told a number of success stories in focus group discussions, the picture of income-generating activities is not equally bright everywhere. Lack of access to

microcredit schemes was a general complaint. Another general problem was interference of men/husbands with the income generated; for example, when women started their farms, their husbands wanted to co-own them. This sometimes led the farm to collapse or made the women drop the whole idea.

With agricultural projects, poor rains, inadequate farm inputs, and poor access to markets, together with the lack of systematic extension education to develop knowledge and skills, were said to frustrate developments. One particular problem was the pledges, which the learners believed had been promised by the providing agencies but had not been forthcoming. In our field visits, a number of different incidents were recounted implicating both FAL and NGOs in several of the districts. Whether or not these were concrete promises is, of course, very difficult to establish, but the *consequence* was a loss of interest by the graduates. If verified, this would be a serious point to settle. It is clearly important to be forever vigilant in communications, so as to avoid possible misunderstandings of this kind.

Use of Reading and Writing Skills

Participants were asked about their frequency of using their skills, and, as a general guide to whether or not they really are using these skills, we contrast those who said they had read, written, or calculated "this" week with those who had not practiced those arts for at least a month. As mentioned in the previous chapter, only a minority thought that their level of reading, writing, or arithmetic had improved since taking the final test (where this was relevant). Nevertheless, the literacy test results signal that it would be wrong to infer that they had lost their skills through lack of use.

Reading

Over three-quarters reported reading books or magazines, varying again across the eight districts, from two-thirds in Arua to over 90 percent in Iganga. About half claimed to have read something that week, although once again there were wide variations, from 31 percent in Apac to 65 percent in Rukungiri; with only a small proportion saying that they had not read anything for over a month. Obviously, remoteness in most rural areas in Uganda exercises a major influence on the physical availability of magazines, even on an irregular basis. Even then, those available tend to be written in English, and there is not much to read in the local languages of the programs.

Those who reported reading books were asked which kinds of books they read, and their answers have been grouped into two categories, which turn out to be approximately equal: nonreligious and religious books (37 percent and 41 percent, respectively, read these books, at least occasionally). While the percentage of the former does not vary very much between districts (and, in general, follows the percentages reading anything at all), the percentage saying they read religious books varies substantially, from 10 percent in Apac to 58 percent in Rukungiri. As has been pointed out before, FAL was introduced into already-existing groups in Rukungiri, many of which were church groups.

There is a not-unexpected relationship between primary school attendance and reading books. The trend in whether or not any books or magazines are read at all is quite strong, with the major difference being between those who received any schooling and those who have not. The greatest impact of prior primary schooling appears to be in terms of reading more *religious* books. In

contrast, the major trend according to the length of literacy class exposure is the increase in the percent reading *non*religious books.

The breakdown by religion itself is also quite interesting. While 42 percent of those professing Christianity said they read nonreligious books and 49 percent said that they read religious books, the reverse was true for those professing Islam: 50 percent said that they read nonreligious books, but only 32 percent said that they read a religious book.

Table 7.3: Percentage Frequency of Reading and Kinds of Reading by District

	Ap	Ar	Bu	Ho	Ig	Mu	Rū	So	All	Range
N	58	70	117	93	106	93	121	95	753	—
1 Do you read books or magazines?	69	69	74	75	92	84	90	80	80	68–92
2 If yes, % saying this week	31	35	59	40	48	41	65	48	48	31–65
3 If yes, % last month or earlier	19	7	3	9	23	20	8	14	12	3–23
4 Percent reading nonreligious books	52	51	43	57	68	42	40	60	51	40–68
5 Percent reading religious books	15	51	57	61	56	62	82	52	56	15–82
6 Do you borrow books from the library?	43	36	56	29	28	22	63	43	41	22–63
7 Do you read newspapers?	52	33	55	29	49	42	61	49	47	29–61
8 If yes, % this week	33	29	25	30	30	25	28	39	30	25–39
9 If yes, % last month or earlier	16	8	19	18	36	35	43	16	24	8–43

Note: Not all categories of response are listed here, and some categories are not mutually exclusive.

Table 7.4: Percentage Reading Nonreligious and Religious Books by Level of Schooling and Literacy Class Exposure

	No schooling	1 or 2 years	3 or 4 years	5 or 6 years	7 or 8 years
N	205	130	159	140	135
Percent reading non-religious books	47	47	56	56	57
Percent reading religious books	38	55	63	63	77
Literacy class exposure		**1 year**	**2 years**	**3 years**	**4 years**
N		320	170	121	142
Percent reading non-religious books		43	53	52	63
Percent reading religious books		59	48	57	65

At the same time, learners cited several examples of serendipitous daily reading that made their life easier: posters and sign posts, notices hung on trees within their communities, calendars to tell dates and months, watches and clocks to tell the time, the weighing scales, and prescriptions on medicine packets as prescribed by medical personnel. Women reported reading letters written

by husbands working in distant places, by children going to school outside the village, and official letters written by head-teachers, LC chairpersons, and secretaries of their women's groups, as well as occasionally newspapers. Those who had children of school-going age reported reading some of the school reports of their children, especially those written in their local vernacular, and claimed they were able to gauge their performance.

Writing

Over four-fifths claim to do some writing, with little variation between districts, although this decreases to under half when asked if they did any writing last week. Exactly half said that they wrote letters (nearly three-quarters in Rukungiri) and over a third, personal notes and exercises (around half in Arua, Hoima, and Iganga). In Rukungiri, where there is a high level of migration (because of the scarcity of land), communicating between spouses is important while personal notes are not.

Table 7.5: Percentage Writing and Kinds of Writing by District

	Ap	Ar	Bu	Hi	Ig	Mu	Ru	So	All	Range
N	58	72	117	93	107	93	115	90	755	—
Do you do some writing?	83	78	68	97	85	81	94	77	83	68–97
If yes, percentage this week	45	36	35	49	56	38	50	49	46	35–56
If yes, percentage last month or earlier	16	11	14	20	19	17	23	12	18	11–23
Percent writing letters	40	38	41	65	39	50	73	39	50	39–73
Percent writing personal notes, exercises	28	55	28	53	44	38	14	26	35	14–55

The breakdown by the level of prior primary schooling and by exposure to literacy classes is shown in Table 7.6. Clearly, except for the contrast between those with and without prior primary schooling, the prior level of primary schooling affects the ability to write letters, but has only a small effect on writing personal notes. Exposure to literacy class has no apparent effect on letter writing but a substantial effect on whether or not participants write personal notes.

Table 7.6: Kinds of Writing by Level of Schooling and Literacy Class Exposure

Kinds of writing	No schooling	1 or 2 years	3 or 4 years	5 or 6 years	7 or 8 years	All
N	167	120	144	139	131	691
Wrote letters	26.3	42.5	52.1	61.2	70.2	49.3
Wrote personal notes	26.0	32.2	41.3	36.4	40.6	34.9
Literacy class exposure		**1 year**	**2 years**	**3 years**	**4 years**	**All**
N		275	158	109	126	668
Wrote letters		51.3	48.1	47.7	47.6	49.3
Personal notes		28.0	37.4	33.0	49.6	35.2

Learners wrote personal reminders about matters like their small business, debtors, and bible readings. Below is a response that was characteristic of almost all districts:

> *I mostly write when I have put a worker in the garden. Even when I am selling, how much I have sold, how much I have spent, and how much I have sold from my produce."* [focus group discussion, Iganga]

Personal letters ranged from writing small notes to their husbands to letters sent to relatives and children in the home town and even those as far as Kampala. Thus they were now able to bridge the physical communication gap between them and their relatives and friends in distant places. They were able to keep secrets because messages were not sent verbally through third parties.

Other writing included sale and purchase agreements, simple applications, and writing/signing their names during meetings. For most learners, especially those who had joined classes, when they could not write their names, this was an achievement: inability to sign had been one of the factors preventing them from attending LC, parent-teacher association (PTA), and club meetings.

Calculating

In regard to using the skills of calculation, 259 (32.7 percent) graduates said they made little use of them, but 534 (67.3 percent) described the kinds of calculations they did: 218 (27.5 percent) said they used it when doing business and 147 (18.5 percent) when keeping records. The remaining 169 (21.3 percent) mentioned other purposes. The breakdown by district showed that there is wide variation, ranging from 23 percent in Bushenyi to 80 percent in Iganga using calculating when doing business, and from 8 percent in Rukungiri to 68 percent in Bushenyi when keeping records. Other uses of calculating, including paying school fees, budgeting/travelling, or shopping, were each mentioned by only a few.

The breakdown by the level of prior primary schooling and by exposure to literacy classes is shown in Table 7.7. There is no obvious association between the level of prior primary schooling and whether or not participants used their numeracy skills for business or for keeping records, while there is a dramatic effect of the length of literacy class exposure on whether or not the participants said they used their numeracy skills for business. The reversal between citing keeping records and doing business for those with, respectively, one and two years of exposure is particularly striking.

Table 7.7: Percentages Using Calculating Skills by Schooling and Literacy Exposure

Levels of schooling	No schooling	1 or 2 years	3 or 4 years	5 or 6 years	7 or 8years	All
N	80	66	80	92	90	408
Business	66.3	54.5	50.0	47.8	47.8	52.9
Keeping records	30.0	34.8	36.3	38.0	37.8	35.5
Literacy class exposure		**1 year**	**2 years**	**3 years**	**4 years**	**All**
N		158	104	62	70	394
Business		36.7	56.7	59.7	70.0	51.5
Keeping Records		52.5	26.0	27.4	27.1	37.1

Further discussions on the kinds of matters in which they use their numeracy skills revealed that all graduates used their numeracy skills in counting money. Examples cited included differentiating among bank notes, calculating balances due to them after purchasing several items from the market or shop, and being able to determine profits or losses after sale of produce or merchandise in petty trading.

Why Not Read, Write, or Calculate?

Those who had passed the tests but were no longer reading, writing, or calculating were asked why. Although poor eyesight is one reason (especially for reading), the major reason for not reading is simply that the participants do not have anything to read (in their own language), either because it is not available or because they cannot afford it. The major reasons for not calculating or writing are that the graduates simply do not feel they have acquired the skills to a level where they can use them with enough proficiency to make it worthwhile. On the whole, these findings fit with our results showing that there is a substantial minority of those who had passed the FAL proficiency test but who were unable to do the relatively simple comprehension, numeracy, and writing tasks on the special test.

Table 7.8: Reasons for Not Reading, Writing, Calculating and Percent Giving Different Reasons (Raw Numbers)

	Why not read	Why not write	Why not calculate
Total number of reasons given	120	93	147
Nothing to (read) (write) (count)	39%	20%	56%
Cannot (read) (write) (count) well enough	25%	42%	61%
Poor eyesight	25%	n.a.	n.a.
Other	11%	38%	

Benefits of Literacy

Although it is difficult to collect reliable information on people's aspirations, the graduates sampled were asked what they see as the benefits of literacy and, directly, what they would like to learn next. On the advantages of literacy, 696 (87.8 percent) were willing to respond. They were invited to give up to three answers. Most respondents (68 percent) gave the general answer that it simply was good to be able to read, write, and do arithmetic; 15 percent added "not being cheated at business," and 17 percent added "improved family care." Variations by district were explicable: for example, the most pronounced variation was in not being cheated at business, which was related to the level of business activity in the localities.

Those without schooling or fewer than four years of schooling emphasized the general response of reading, writing, and arithmetic, compared with those with five or more years of schooling, who gave a wide variety of other reasons, such as literacy's benefit to their skills in family care. The breakdown by length of exposure to literacy classes suggests that participants become increasingly confident at not being cheated at business.

Table 7.9: Percentages of Views of the Advantages of Literacy According to Level of Primary Schooling and Literacy Class Exposure

	No schooling	1 or 2 years	3 or 4 years	5 or 6 years	7 or 8 years
N	**177**	**119**	**146**	**123**	**120**
Reading, writing, arithmetic	79	79	75	56	40
Not being cheated at business	18	19	19	9	7
Improved family care	13	15	14	16	26
Other	64	71	71	107	123
Literacy class exposure		**1 year**	**2 years**	**3 years**	**4 years**
N		275	143	112	133
Reading, writing, arithmetic		65	71	58	77
Not being cheated at business		10	15	21	19
Improved family care		21	15	12	12
Other		87	82	87	79

Advantages of Being Able to Read and Write

Reading and Writing Names

One of the major benefits was simply being able to read and write names. This newly acquired skill enabled learners to participate in community meetings and to exercise their rights in voting, with the ability to read the name of a candidate of one's choice and place a tick against his/her name. For example:

> *Writing of our names during meetings is important. Before we used our thumbs, or we used to ask those who sat near us to write for us or never attended meetings at all. We used to feel bad and embarrassed. We now feel motivated to attend meetings and able to make suggestions during discussions.* [focus group discussion, Madudu, Mubende]

> *By voting using finger prints we were not happy, because in most cases we would be directed to print, sometimes we would be misled to do for another person and in most cases people would fear to eat because of the ink on the fingers. Now we can tell the person we have to vote for, when you know it is ticking, it takes less time.* [focus group discussion, Bugambe, Hoima]

Avoiding Manipulation and Cheating

According to the learners, avoiding being manipulated and not being cheated have led to some increase in their levels of income. Some quotations are given below.

Before, we used to be cheated and we depended on others to read for us.

Sometimes, even those we trusted could connive with the produce buyers to cheat us. [focus group discussion, Hoima]

When I was cooking food for selling, I used to sell some to builders on credit. And when time came for payment, they used to harass me, asking for where I had written. [focus group discussion, Iganga]

I sold a tin of sorghum at U Sh 4,500, which was actually supposed to be U Sh 6,500. When my child came back from school, she counted the money and found that instead of U Sh 6,500 I had been given U Sh 4,500.

Other Benefits from the Programs

Improved Family Care

Improved family care was another topic considered in the focus group discussions. These graduates now clearly knew how to improve their health through hygiene, nutrition, and sanitation. Moreover, many said that due to the knowledge and skills they had acquired, they give their children a balanced diet, boil water before drinking it, and take their children to health centers for immunization and check-ups because they know the importance of that. Others said that they now give drugs properly, compared to when "We used to give children overdoses, because we used to forget the verbal instructions for drug use given by the doctor. And they used to blame us for negligence and carelessness." [Tumbu Circle, Busimbi, Mubende]

They also cited the availability and use of latrines in their homes as another consequence of literacy: "I used not to dispose of garbage but now I know where to put it. It used to be scattered around, causing a lot of flies around the home or where I prepared food."

Self Confidence and Esteem and a Sense of Empowerment

One woman in Hoima proudly said:

I wrote a letter to the headmaster after my child had been hurt by another pupil. His arm had been dislocated in the joints, so I wanted treatment from the parents of that pupil and I got it.

We have learnt how to talk and to ask questions and this has built our self-confidence. One day we got visitors in our circle, and our instructor, Mrs. Musumba, called upon me to talk. Before, I used not to be sure of what to say, thinking that whatever I say is wrong and those I am addressing knew more, but I was applauded when I finished. [Salla Circle, Busimbi]

Participation in Civic Activities

Indeed, because of the skills and self-confidence gained, it was reported that some learners had been elected to LC executives and to leadership positions in their areas. There were several cases of learners

who managed to put to practice the skills learned. A middle aged-woman, who joined literacy classes without knowing how to read anything, testified that she could now read verses in the Bible during church service. She was interviewed by *New Vision*, a national newspaper, and, after her photograph appeared, many people have since joined literacy classes because of her achievements.

Another story is taken from the Mid-term Review report of the SCF Female Adult Literacy programs, Arua, March 1999:

> ***LITERACY LEARNER BECOMES TREASURER***
>
> *Mariamu Aliferu, 56 years of age, got married at 17 years soon after she was raped as she was going to collect water; and was divorced soon after. When Mariamu joined Obolokofuku Literacy Circle, she had very few expectations with regards to getting hope in life. With detailed and authentic discussion held in the circles, coupled with her fast acquisition of numeracy skills, she tells of a real experience during a village meeting called by the local council chairman in which she challenged men to "release" some of the power to women. On the agenda of the meeting was election of a treasurer of the village bore hole. Probably as a challenge, some men suggested her name, and lo, she has lived up to their expectations! She now keeps records of the monies received and the households that are paid in.*

Decisionmaking at the Household Level

Behavior change leading to sharing of rights and responsibilities at the family level is emphasized in the FAL primers and all other programs. The key to this behavior change is shared decisionmaking by spouses at the household level. The focus group discussions brought out the achievements of the programs, as the following examples show:

> *We participate in decisions that affect us in our homes like allocation of money to school fees, clothing, medicine, etc.* [focus group discussion, Busimbi, Mubende]

> *They have gained self-confidence. Women who never used to say a word now are very articulate and challenge men.* [focus group discussion, Arua]

Improvement in Household Income

Improvement in household income was also mentioned by some program participants, for example: "I planted in the right season, and I got 25 bags of maize. I sold each bag of 100 kilograms at U Sh 220 per kilogram. I got U Sh 550,000 out of the 25 bags. [focus group discussion, Busimbi]

Easy Communication and Getting Along Easily

Graduates explained that it was easy to locate places on their own, thus saving them the inconveniences and embarrassment of having to ask strangers for help. Several women had previously had experiences like entering men's toilets, going past their destinations, asking for a place that they were already in, or asking for directions when there were signposts, banners, posters, or labels clearly marked. A male graduate revealed that he now felt secure when

travelling in Kampala, because he could read labels on taxis instead of asking, which would arouse suspicion around him and make him vulnerable to thieves. The graduates also revealed they were now able to heed warnings by reading posters. They cited posters like those of roadblocks, "danger" "*kabi*," "*hatari*," "*usivute sigara*," "don't smoke," and others.

Schooling of Their Children

One expected outcome of adult literacy is more positive attitudes toward the schooling of children. A number of questions were asked about the schooling of the respondents' children, distinguishing between the schooling of the boys and the girls: how many of their boys and girls had completed or were still at primary school; how many had dropped out and, if so, for what reasons; and how many had not started and, if so, for what reasons.

It is clear that, overall, the vast majority of parents do send children of both sexes to school, that there is very little gender discrimination, and that, even within the district samples, the percentages favoring boys rather than girls (or vice versa) are typically very small. However, there is a statistically significant difference between the graduates and the nonliterates in terms of sending their boys to school, and the nonliterates are also more likely to report that they are more likely to send their boys than their girls to school. Further checks by level of prior primary schooling and by length of literacy class exposure shows very little variation although there is a slight tendency for those with more primary schooling themselves to be less likely to send their children to school and for those with more literacy classes to be more likely to send their children to school.

Table 7.10: Percentages of Graduates Sending Their Boys and Girls to School by Level of Own Primary Schooling and Literacy Class Exposure

Level of schooling	No schooling	1 or 2 years	3 or 4 years	5 or 6 years	7 or 8 years
N	177	119	146	123	120
Boys	89	84	83	85	83
Girls	86	86	85	79	83
Literacy class exposure		**1 year**	**2 years**	**3 years**	**4 years**
N		275	143	112	133
Boys		84	84	91	85
Girls		82	84	80	88

The small numbers who did report boy or girl dropouts, and not sending their children to school in the first place, were asked for their reasons. The major reason for both boys and girls was school fees. The secondary reason for boys was that they were needed for production activities at home like assisting in gardening, scaring baboons and monkeys in the gardens, and, for those who live near lakes, fishing. The secondary reason for girls was getting married. The numbers involved were very small, however, so that further analysis would be pointless.

Learners Assisting Their Children with School Work

There were four questions that sought information about parents assisting children with their schoolwork. Overall, nearly half said they discussed schoolwork with their boys and girls and that

they checked the homework of their boys and girls. Although there is very little difference between any one respondent's answers to the four questions, there is variation between the districts from only just over a third in Hoima and Mubende to over two-thirds in Arua and Rukungiri. But perhaps the most important observation is that the graduates were nearly twice as likely to discuss schoolwork and check homework as were the nonliterates.

Learners reported that they have appreciated the value of education and were spending more time to help their children with their work: "Before, when they got home from school, I would tell them to go and fetch water. I used to light fire with their books. My daughter was being helped by a friend all the time to do her work and I could not even tell."

Graduates' Educational Aspirations

When asked what they would like to learn next, the sampled graduates were asked to specify what they would like to learn *most* and prompted to give up to three answers. Of the 718 replies to this question (90.5 percent of the total graduate sample), the most popular was English, followed far behind by advanced reading and writing, and, even further behind, by vocational skills, modern agricultural practices, business skills, which, grouped as "directly functional skills," together mustered just half the total of the aspirations for English (see Table 7.11). For instance, in a sample where three out of four make their living through agriculture, modern agricultural practices attracted just 54 mentions, 7.5 percent of the total. The contrasting high demand for English (45.4 percent) reflects the situation in which the graduates find themselves. They have learned to read and write in their own languages, but most of what they need to read is in English: sign posts, directions in official buildings, instructions on medicine bottles or packets, information on most product packages. Without some command of English, therefore, their opportunities for using their literacy skills are very limited.

The breakdown of the 718 who replied by district is given in Table 7.11. There are substantial and comprehensible variations between the districts, with the most popular responses in Mubende (58 percent) and Soroti (59 percent) relating to learning English, compared to only 22 percent in Apac. Other responses included Kiswahili, Bible knowledge, health education, banking, home management, family planning, and some others.

Table 7.11: What the Graduates Would Like to Learn Next (Raw Numbers)

	Ap	Ar	Bu	Ho	Ig	Mu	Ru	So	All	All %
English	13	25	40	30	56	52	55	53	324	45.3
Advanced reading and writing	7	11	22	9	22	17	7	24	119	16.6
Directly functional skills	23	15	30	33	11	11	33	5	161	22.4
Other responses	12	14	24	14	18	9	17	4	112	15.6
No. of respondents	55	65	116	86	107	89	112	86	716	99.9

When the data are grouped by schooling and exposure to literacy classes (Table 7.12), those without schooling and the least schooling show the strongest demand for advanced reading and writing skills, although they demand English somewhat more strongly. Evidently, they feel the need to consolidate the skills so far acquired. Those with more schooling, since they had already

consolidated their mother-tongue literacy skills, emphasized English. There is little variation according to the length of literacy class exposure.

Table 7.12: Percentage Naming What They Would Like to Learn Next by Primary Schooling and Class Exposure

	No schooling	1 or 2 years	3 or 4 years	5 or 6 years	7 or 8 years
N	179	123	151	128	127
English	35	54	49	43	42
Advanced reading and writing	31	24	15	6	2
Directly functional skills	5	3	7	9	11
Literacy class exposure		**1 year**	**2 years**	**3 years**	**4 years**
N		277	150	115	135
English		42	47	53	47
Advanced reading and writing		16	18	17	14
Directly functional Skills		5	7	9	9

Local Leaders' Views on Benefits of Literacy

The focus group discussion with local leaders explored their views on the benefits of literacy. In Bushenyi, the officials had very high hopes in literacy. They said literacy skills help people to feel confident, read various documents, and learn more. The subcounty had set up four literacy learning centers. They believed that voting would be easier after the people had become literate. They appreciated the functional aspects of the literacy program, such as learning how to be clean and lead healthy lives; and how to cooperate with others and work hard to earn more.

A local leader in Hoima said:

> *Mothers can now follow how to administer drugs to their sick children. Women are more aware about AIDS and family planning. The women have learnt the importance of safe water. They boil drinking water and cover it. Their kitchens and latrines are clean. The feeding of children is better. There is marked improvement in body cleanliness and houses, and we have noticed that even people who do not attend FAL classes are trying to copy good practices from those who attend.* [LC Executive, Hoima—Buhimba subcounty]

Other local leaders in Hoima observed that learners are building latrines and trying to assist each other in putting up latrines in their homes. Nutrition (balanced diets) has improved, and cleanliness in homes has also improved. There is food security. People have granaries.

Local leaders elsewhere observed that learners now easily bring their children for immunization, because they have known the importance of immunization through literacy. They have learned about family planning and, these days, take children to hospitals rather than administering local drugs. People now vote by ticking instead of putting fingerprints. Adult literacy also helps women to improve on reading and writing, which will lead to easier loan acquisition.

In Iganga, a local leader observed, "A literate person understands issues very quickly. Literacy programs equip people with skills to improve on food availability in the home. A literate person participates actively and effectively in many community activities. They send their children to school, have the proper knowledge to look after their children. Literacy programs also equip people with skills to practice family planning, live healthy lives, and eat proper food. They also give people self-confidence."

Local leaders in Mubende observed that the people who had participated in the classes are able to have food security through improved agricultural methods acquired from the literacy classes. They can learn how to acquire loans. They have also developed a community spirit of *Bulungi Bwansi*, whereby they clean their spring wells, ensuring clean water supplies. They also maintain community roads and footpaths, boil water before drinking, maintain a harmonious relationship among the community members, and have stable homes as a result of democratizing the decisionmaking process in their homes.

Summary

The purpose of this chapter was to explore the uses that recent learners made of the skills and knowledge they had acquired from their classes. What value did they now place on literacy, what benefits did they see, what more did they want to learn?

The great majority of the sampled graduates—four-fifths—reported that they used and valued their new skills and knowledge. Three-fifths reported involvement in income-generating activities connected with their classes and skills, and claimed that their lives had improved as a result. There is certainly variation between subcounties and districts: the main explanatory factors seem to be remoteness from urban centers and access to reading and writing opportunities and materials. There is also variation by level of previous schooling and exposure to literacy classes.

The fifth of the sampled graduates who reported little or no use of their skills cited as the main reason that they felt they had not attained a sufficient level of skill to be able to apply it successfully. The inference is that some people are being certified as graduates when they themselves do not feel they have reached the requisite level.

In terms of the perceived benefits of literacy, the majority in all districts were content with simply and generally being able to read, write, and calculate more accurately. Other advantages or benefits ranged from those that helped meet practical needs, like improving family health, food security, increasing family income, and ability to pay children's school fees, to those that helped enhance social roles not only in their families but in their communities also, like the ability to participate in civic activities—for example, attending local council meetings, taking part in voting, and participating in decisionmaking.

Self-confidence and self-esteem were cited as on the increase among most of the graduates. Another benefit cited was the graduates' capacity now to communicate using more than speech. Not to be cheated and manipulated was also commonly cited as a decided benefit, especially in the focus group discussions.

The analysis of their children's schooling showed that nearly everyone reported sending their children (both boys and girls) to school and there did not appear to be any discrimination between the sexes. Moreover, there was a distinct difference between the graduates and the nonliterates,

regardless of the level of prior primary schooling. The graduates spend more time discussing school matters with their boys and girls and more time looking at their homework.

In terms of aspirations for future learning, nearly half the graduates want to learn English. Just under a quarter would like to learn a variety of vocational and business skills, while a sixth want to consolidate their recently acquired skills through advanced reading and writing.

Inferences for Policy and Practice

The first inference from these data for policy and practice is surely that the literacy programs are worthwhile in the eyes of most of their beneficiaries and in terms of the uses that most beneficiaries make of what they learn. The programs seem to merit continued support.

However, the data also point to needs for improvement:

- About a fifth of the officially successful graduates do not have the confidence to use their skills.
- Between 30 and 40 percent of the graduates do not experience any effort to integrate literacy skills and class knowledge with actual practice in income-generating or other projects. The corollary is that perhaps a third of the instructors are not putting one of the important intents of the programs into practice and may feel inadequately equipped to do so.
- Even graduates who do have and use the skills of literacy have difficulty in obtaining materials on which to practice.
- There is a sizeable unmet demand for further education: the aspirations articulated in this chapter are substantiated by the earlier finding that most graduates continue participating in classes, even though they have completed the course and have been officially certified as successful.
- Interest in higher mastery of literacy and in moving on to English is much more powerful than interest in useful, even income-generating, knowledge for vocations and business.

To make adult basic education programs in Uganda more efficient and effective, policymakers and practitioners need to address these points. They will appear again in Chapter 9 in the discussion of recommendations.

Chapter 8: Program Costs and Cost-Effectiveness

This very brief chapter deals with the funding and costs of the literacy programs, but is only a summary of a much fuller and more detailed discussion in Chapter 8 of the technical volume (Okech et al. 1999) of how costs, effectiveness, and benefits were calculated. This summary will serve simply to give the policy adviser and practitioner an approximate notion of the unit costs of the FAL, REFLECT, and SOCADIDO programs.[23]

Programs Funding

Originally, the central government shouldered full responsibility for the funding and implementation of the national literacy programs through its Department of Community Development. Since 1992, however, limitations on public expenditures have forced the government to accept much of the funding for the programs from external sources. Initially, the Ugandan government matched grants from these sources, so that its contribution constituted 50 percent of the literacy budget. The policy of decentralizing powers and responsibilities, however, has led to the district and subcounty governments taking over some of the responsibilities for the programs, so that recently the central government's contribution has declined to about 30 percent of all FAL resources.

While districts and subcounties do budget for the literacy programs, the amounts that they allocate vary greatly, ranging at subcounty level from as little as 25,000/- to as much as 1 million/-. In some cases, budgets for literacy have remained only on paper, without any actual or substantial expenditure on literacy activities. In many districts and subcounties, revenue collection is usually well below the budgeted amount and, in such cases, FAL is likely to be one of the first items to be cut back.

Financing by NGOs for literacy programs is more systematic, and there is provision for paying the instructors, although the monthly rates vary from 10,000/- (in some REFLECT activities) to 45,000/- (in SOCADIDO). The demand for at least token payment of instructors was great everywhere. All categories of stakeholders—learners, instructors, program managers, and community leaders—felt it would make a difference to the performance of the programs.

In addition to the direct financial inputs from government and NGOs, communities and participants in the literacy programs had offered support in kind: putting up shelters for classes, allocating land for class projects, and, in some cases, giving some form of reward to instructors on big occasions. Such rewards were usually not regular: communities saw regular remuneration as the responsibility of the government, central or local. In some cases, where the learners themselves had started giving some contribution to their instructors, officials at the district and subcounty persuaded them to desist, fearing that the prospect of having to contribute would discourage some nonliterates, especially the poorer, from enrolling in the programs.

[23] Although we were not able to include any SOCADIDO graduates in the sample, we were able to obtain data on costs that were not available from SCF and WEP.

Estimating Costs

The interregion and interdistrict differences in budgeting for and actually funding literacy are the first factors in the complexity of assessing unit costs. In addition, although the overall amounts *budgeted* for the adult literacy programs are, in principle, relatively straightforward, they are not easy to translate into actual expenditures on adult literacy, even on the assumption of no frictional losses between the initial budget statements and on-site expenditures. Moreover, there is no consistent method of collecting information at the subcounty level on actual expenditures. This is partly because the process of decentralization has made responsibilities and roles complicated, partly because other donors have made uncosted contributions and partly because the CDOs and CDAs responsible for the literacy programs were responsible for other activities also.

An attempt was made to estimate program costs, but generating reliable estimates proved difficult. For example, instructors incur and generate costs even though they are volunteers, principally in terms of training: how can such costs be calculated and apportioned? Further, should the learners' expenditures on materials enter into the account, and, if so, how might they be accounted for reliably, and should they be augmented by some calculation of the learners' opportunity costs?

Behind all these considerations is the major problem that we cannot establish the basic statistics on adult learners because of the difficulty of counting. We have had to calculate plausible approximations for enrollments, attendance, completion, repetition, and growth in enrollments, as well as for unaccounted costs.

Estimating Benefits

The assessment of unit benefits is also complex because there are several possible dimensions of benefit for the graduates. Have they, for example, learned the three Rs in any way comparable with what the pupils of Primary 3 and 4 have learned? Compared with nonliterates, have they gained measurably in terms of functional knowledge, attitudes, and skills? Do they enroll their children in school proportionately more than nonliterates? Do they contribute more to community decisionmaking than they would have if they had not taken their literacy classes? None of these can be easily valued in monetary terms, and so we have suggested using the difference in scores as a provisional measure of benefit.

Cost-Effectiveness

Given these cautions about our various assumptions and data, we have calculated the following estimates of the unit costs of programs in terms of their effectiveness of producing certified graduates:

- FAL: US$4–5 per certified graduate
- REFLECT: US$12–15 per certified graduate
- SOCADIDO: US$20 per certified graduate
- Primary school 4: US$60 per pupil completing Primary 4 in four years.

The relatively low FAL estimate results from not providing any payment for the instructors, while the estimate for REFLECT may have omitted some significant development costs.

PART IV: CONCLUSIONS AND RECOMMENDATIONS

CHAPTER 9: CONCLUSIONS AND RECOMMENDATIONS

The objectives of this evaluation were to compare and contrast the resource requirements and the effectiveness of the FAL programs and REFLECT, assess the implementation of adult literacy education; and recommend future policy on the development of adult literacy education. To achieve those objectives, the evaluation undertook:

- An analysis of effectiveness in terms of both the attainment and retention of reading, writing, and arithmetic skills and of facilitating the acquisition of practical knowledge, along with appropriate changes of attitude and practices (in particular, knowledge about prevention of HIV infection and care of persons with AIDS)
- An analysis of the factors affecting each of these elements
- An effort to assess the costs of activities, the quality of materials, the extent of local commitment, and the adequacy of monitoring and supervision
- Thence to make appropriate recommendations to the government.

This chapter addresses the fourth task in two parts. The first reviews in summary the findings of the previous chapters and draws some conclusions. The second presents some recommendations for the Department of Community Development, the Ministry of Gender, Labour and Social Development, and the government of Uganda to consider.

Conclusions

The conclusions presented here are based not only on the various instruments that were used for data collection and direct observation, but also on the fieldwork experience. The eagerness and goodwill manifested by practically all those whose contribution was required during the evaluation were indicators of the interest and demand for adult literacy education. The ardent desire of the learners and program graduates to be interviewed and to communicate with the "outside" world was especially evident. The conclusions therefore draw freely on all the above.

Achieving One Important Goal

The first fact of note is the overwhelming participation by women in the literacy programs. It underlines and helps fulfill one of Uganda's important goals, which is to redress the imbalance in opportunities between men and women. Moreover, many of the issues being addressed by the

programs have, in practice, more relevance to women than to men—for example, health, food security, gender relations, and environment. Indeed, among the most striking outcomes of the literacy programs are the women's increased self-confidence and their greater willingness to participate in community decisionmaking.

Missing the Target?

The second fact of note is the high percentage (73 percent) of people who had actually been to primary school. Half of these had attended five or more years and should have attained at least a usable command of reading, writing, and calculation. Their heavy presence among the programs' graduates raises not only a question about the efficacy of primary schooling, but also the possibility that the adult literacy programs may be missing their true target, the completely illiterate population. In the focus group discussions, it was suggested that real nonliterates might be discouraged when trying to learn in the company of various levels of school leavers, while others might be deterred from enrolling in the first place. The first conclusion then is that FAL is serving more as a second-chance program for primary school leavers than as a literacy education program for people who never went to school.

Conflict of Policies?

The government has among its many goals and policies the aims of democratic decentralization and universal literacy. Our observations suggest that the two are not necessarily compatible, since the variations between the districts and subcounties in budgeting for and actually funding literacy education programs are strikingly wide. It is clear that some local authorities do not attach the same priority as the central government to universal literacy. The second conclusion is that the government will need to negotiate a balance between promoting decentralization and ensuring the maintenance of its priorities.

Attainment of Reading, Writing, and Numeracy

The third conclusion concerns the mastery of literacy skills. If the test designed for this particular study is an acceptable indicator of attainment, and if the focus is the "real nonliterate" learner, then, although the overall sample of graduates attained satisfactory levels of skill in reading and calculating, the focal group did so only in the test of simple comprehension (see Table 6.8). In complex comprehension, numeracy, and writing, their attainments are very much behind those of the majority, with average scores of less than half the possible maximum. That said, it remains a fact that the nonliterate adult learners attained levels of reading, writing, and numeracy higher than those of Primary 4 pupils in the same localities. From that perspective, FAL and the NGOs serve their learners more effectively than the primary schools serve their pupils. The Ministry of Gender, Labour and Social Development may wish to bring these facts to the notice of the Ministry of Education.

The fourth conclusion flows from the facts that the lowest scores for both the nonliterate and the schooled groups were in writing and that about a third of the graduates did not attempt the writing test. Admittedly, this section of the test assessed not only the correct spelling of the words, but also the ability of the graduates to compose complete and meaningful sentences, so that the standard could be deemed excessively demanding. The inference is either that there is a pedagogical problem to be addressed, or that the program designers have

overestimated the mastery of writing that the average nonliterate adult can achieve within the period of the course.

Related to the fourth conclusion is the fifth. Fairly high percentages of programs graduates felt that they had not yet acquired a useful level of literacy skills. For reading, 20.8 percent; for writing, 45.2 percent; and for calculating, 41.5 percent of the explanations for not using the skill were that the respondents were not sufficiently confident in them. The literacy skills they had attained were not yet functional in the sense that they enabled people to "engage in all those activities in which literacy is required for effective functioning of his group and community and also for enabling him to continue to use reading, writing and calculation for his own and community's development." The inference is that the program designers need to consider how such proportions can best be reduced.

The sixth conclusion springs from the variations in the test scores. These were substantial between locations and according to previous exposure to primary schooling. No other factors stood out clearly as affecting performance. The variations between locations were related partly to variations in socioeconomic conditions and more strongly to the level of enthusiasm and support for the programs in the different districts and subcounties. These variations point to the need for programs that are not only designed to respond to the variety of situations in different locations, but that are also assured sufficient levels of support and efficiency in their implementation.

Utilization of Reading, Writing, and Numeracy

Despite the relatively poor availability of newspapers, magazines, and books in the languages used by FAL and the NGOs and in the subcounties of the eight districts, a majority of the sampled graduates reported using their skills in all three dimensions of literacy. At the least, they were pleased to be able to deal with circumstantial reading—for example., posters, notices, labels on doors and drugs, bus numbers and destinations—a more common form of utilization of reading, which came out strongly in the focus groups. Majorities also reported using their writing and calculating skills for various purposes. The seventh conclusion, then, must be that the FAL programs have in fact enabled most of their participants to achieve a useful degree of mastery in literacy. In addition, as a large proportion of the sample were still attending classes, despite having graduated, FAL seems to have stimulated them to persevere with the intent of developing their skills further.

Acquisition and Utilization of Functional Knowledge, Skills, and Attitude Change

Functional Knowledge

On the test of knowledge, the sampled graduates systematically outscored the sample of nonliterates, and in almost all the cases the differences were substantial and statistically significant. The eighth conclusion, then, is that participation in the literacy programs reinforces and accelerates the acquisition of functional knowledge, which might be available from a number of sources. That said, the scores of the nonliterates also suggest that the designers and writers of the primers are not well acquainted with and underestimate what the learners and general nonliterate public already know.

Attitudes

The ninth conclusion is similar: the sampled graduates were more likely to express modern attitudes than the sampled nonliterates, so that participation in the FAL programs probably reinforces and accelerates the adoption of modern attitudes. However, two modifications are in order. First, although the nonliterates were less modern on almost all items, the differences were less substantial than in the knowledge questions. That observation suggests that other media—radio, public rallies, local seminars—are exerting considerable influence on the population at large. Second, within the graduate sample, there were significant and striking variations in attitude scores between the subcounties. This indicates that, in addition to and possibly in competition with the literacy programs, there are other contextual variables that are influencing people's responses to new knowledge and ideas.

Modern Practices

The tenth conclusion extends that last observation. The score for modern practices was only 45 percent of the maximum. It seems to confirm that attitude change does not automatically follow knowledge acquisition, and that change of practice does not automatically follow attitude change. Clearly, factors like established beliefs and habits, communal cultural attitudes and practices, peer pressure, and even practical considerations, like the availability of resources, intervene between simple knowledge and changes in practice. The inference is that, although programs like FAL may indeed facilitate and accelerate desired change, their effects are not necessarily immediate and may need forms of reinforcement.

Actual Practices

Nevertheless, 71 percent of the graduate sample did declare that the skills they had learned from the literacy classes had helped them to boost their production and earn more money from the sale of their crops and animals, as well as from a range of handicrafts—basketry, mat making, embroidery, pottery, constructing fuel-saving stoves. That points to an eleventh conclusion, namely that it is sound policy to use a twin-track approach in literacy education: use the programs to raise the productivity of familiar occupations in the short term and simultaneously introduce new ideas for longer-term germination.

Social Benefits

For themselves and their families, the graduates reported having adopted healthier practices, including better personal and environmental sanitation. Additional practical benefits included greater levels of participation by the graduates in the governance of their communities, along with weightier significance in the roles they played. The twelfth conclusion is that Uganda's literacy programs generate benefits not only for their learners, but for wider circles of people around them, too.

On the whole, the majority of graduates seemed satisfied with the benefits they had reaped as a result of participating in the programs. Discussions with community leaders reinforced the views of the graduates and the observations and impressions of the research team. However, the positive tone of the preceding paragraphs needs to be tempered by this observation: the graduates, mostly women, are still working at a bare subsistence level, even though in some cases they may be more productive than before, and they are unlikely to break out of the poverty in which they are stuck.

Many joined the literacy programs with the hope of access to credit or some other scheme, which could enable them change their situation significantly. Most of them have had to be satisfied with much less. Although some of them sounded happy during the focus group discussions, their situation still poses a big challenge to the program providers and to the government.

Administering the Programs: Literacy Materials and the Literacy Environment

By and large, the NGO programs were adequately supplied with materials and the wherewithal to conduct their classes satisfactorily. The FAL programs, too, had made available primers and instructors' guides to the literacy learners in the sampled districts, but apparently in quantities not always related to the number of enrollments. In a few cases, primers were found at the district headquarters when they should have been in the classes. Follow-up readers and their instructors' guides were also available everywhere, except in the Soroti district. We conclude that relatively minor steps could achieve a more satisfactory distribution of materials.

For the various language areas, there was a wide diversity in the quality of the primers and in the amount of detail in the instructors' guides. The good primers had all that was required to be covered in basic literacy and basic adult education. Others were, however grossly inadequate, both in the reading and writing and in the functional aspects. On gender sensitivity, the primers made an effort to handle the common gender issues. From the view of user-friendliness, there were some complaints, especially from older women, about the small print in the primers, which made them very difficult to read. We conclude that a careful review and revision of the primers and instructors' guides would be beneficial.

The REFLECT approach avoids using a primer and prefers to use tailor-made materials to guide the facilitators. In the longer-established REFLECT programs, the facilitators had complete sets of training manuals to guide them, whereas in Apac, the facilitators had only a small number of units to use. Some REFLECT facilitators reported that they felt at a loss without teaching materials. There were also some indications that the graduates from the REFLECT programs were interested in obtaining primers from the FAL programs. The approach of producing materials in the circles together with the learners did not seem always to be working satisfactorily. We conclude that REFLECT, as currently implemented, would also benefit from a review.

The WEP and SCF programs in Arua, while not having prescribed primers, did not rule out their use. In some cases, they had adapted reading materials from other programs. Both SCF and WEP appear to have successfully worked together with the learners and facilitators to write materials that were being prepared for subsequent use in the literacy programs.

General reading materials outside the programs were lacking for graduates in all programs, and there was a great demand for follow-up reading (as well as for instructional materials). There did appear to have been some limited effort by the various programs to create a literacy environment. Thus, in some cases newsletters had been produced, although the circulation did not match the demand.

Funding, Costs, and Cost-Effectiveness

The central government's share in funding FAL has declined from 50 percent to 30 percent, apparently as a result of the decentralization policy, which has required local government bodies

to fund adult education, at least in part. The central government appears also to have devolved responsibility for determining the priority that literacy education should attract, for the districts and subcounties vary in their allocations between U Sh 25,000 and 1 million per year, as well as in their actually spending the money for the purpose budgeted. Our conclusion is that, if universal literacy is not a *national* priority with accompanying measures to ensure that local governments also treat it as a priority, it will likely not be achieved by 2010 or 2015. While the NGOs, which interest themselves in literacy education, will doubtless fund their programs reliably, they cannot on their own handle the entire national need.

Within the funding policy, the inconsistency between the government, which relies on volunteer instructors and accepts no responsibility for rewarding them, and the NGOs, which offer remuneration varying between U Sh 10,000 and 40,000 per month, generates discontent and complaints, and may threaten the sustainability of a national effort.

Estimating the costs of the various programs was difficult. However, under assumptions that are explained in the technical volume, the best estimates put the unit costs of the programs at US$4–5 per graduate for FAL and US$12–15 per graduate for REFLECT. The difference arises mainly from the fact that the REFLECT programs, along with those of other NGOs, pay their facilitators a monthly honorarium. These figures are low, especially when put alongside an estimate of US$80 to bring a child to a slightly lower level of literacy and numeracy at the end of Grade 4 in primary school. In the light of the gains of the graduates in literacy, numeracy, knowledge, and practice, we conclude that the cost-benefit ratio is favorable.

Comparing FAL and REFLECT

One of the tasks of the evaluation was to assess the comparative advantages of the FAL and REFLECT programs. We need to note again that our observations are limited to only two districts and that in Apac, the REFLECT programs had been running for only one year. Subject to these limitations, our conclusions follow.

Target Groups/Enrollments. Both programs focus, in principle, on those who had never attended or who had dropped out of school in the early stages of formal schooling. In some centers, however, both had attracted and enrolled participants who had gone as far as the Grades 5 and 7 in primary school. Both programs include a wide age range and aim to enroll both men and women.

Programs Content—Utilization of Skills. Both programs emphasized functional skills training in addition to basic literacy. A wide range of topics—including health-related issues, improved agricultural practices, civic and political awareness, environment protection, etc.—were reported to have been covered during classes. In both programs, graduates were asking for continuing education in areas like advanced literacy, English language, vocational skills, and modern agricultural methods, but neither program seemed to be making any provision for these.

Participation Issues. Examining enrollment and attendance registers and discussions with community leaders, instructors/facilitators, and learners revealed that enrollment and attendance was usually high during the initial four to six months of both programs. However, there was some dropout of learners as the programs continued, but precise or even approximate rates could not be calculated for either program from the data available. The causes were said to be partly increases in workloads at home, and partly unmet expectations (some learners believed that they had been promised a lot of assistance/support).

Teaching/Learning Materials. In the FAL programs, learners for the most part had primers. In some centers, insufficient copies were available, so learners had to share and return the primers to the instructor at the end of the class. Obviously, learners without their own copy could not practice reading on their own after classes. Most of the instructors had instructors' guides, which they claimed they were using to prepare for their classes. Although the REFLECT groups did not use primers and developed their own materials, they did demand supplementary reading materials.

Training of Instructors/Facilitators. In both programs, the majority of instructors had only a primary school education. In the FAL programs, this was supplemented with an initial training of five days, followed by a two-day refresher course. Both organizers and instructors acknowledged that this supplement was inadequate, given the very basic educational foundation in face of the pedagogical task of helping adults to learn. In contrast, facilitators in the REFLECT programs (and in the programs of other NGOs) had received two to three weeks of intensive basic/initial training, followed by regular refresher courses, support, and supervision. This may account for the respectable quality of teaching materials they had developed with their groups and their reported good relationships with their learners.

Monitoring and Supervision. Monitoring and supervision in both programs was found to be inadequate, although monitoring and supervision in REFLECT was rated better in comparison with FAL.

Effectiveness of the Programs. The finding, reported in Chapter 6, that the graduates of FAL and REFLECT did not differ markedly in their literacy attainments, knowledge, attitudes, or practices makes drawing any conclusions a baffling task. Contrary to what would seem reasonable expectations, instructors using a more traditionally didactic approach, with poor training and support and no pay, are apparently as effective with nonliterate people as facilitators who use a totally learner-centered and -based approach, with good training and retraining, good support, and good pay. This paradox leads us to retreat to the hypothesis that the samples on which the comparisons were based were too small to provide safe conclusions.

Recommendations

The recommendations we offer arise from the more general conclusions above. They move from considerations of broad policy for a national plan of adult basic and continuing education to matters of detail in implementation.

Consistency in Policy

If the government genuinely sees the achievement of universal literacy within a decade or so as a national priority, it needs to ensure that the implementation of its policy on decentralization does not undermine that priority. It also needs to ensure that the national standards for literacy materials and instruction are known and maintained.

Recommendation 1: The Ministry of Gender, Labour and Social Development should arrange for the central government vigorously to reactivate its commitment to the FAL programs and to sensitize the local governments to their importance for the country's development. The ministry should also devise a scheme that encourages and rewards local authorities, who plan, budget for, fund, and implement adult basic education in line with national priorities.

Recommendation 2: In line with the way that the Ministry of Education and Sports ensures quality in schools, despite the decentralization of the provision of basic education to the districts, the Ministry of Gender, Labour and Social Development, through its Functional Adult Literacy Coordinating Unit, should have the mandate to support quality in all adult literacy education programs. To do this and to provide technical assistance in developing programs, which respond appropriately to local situations, the Coordinating Unit would need professional strengthening and access to resources to hire specialized people, where required, for short-term assignments.

Nature of Adult Basic Education Programs

Currently, the adult literacy and basic education programs attract mainly those who have previously had primary education, and mainly women. It is imperative that they also attract and retain the people for whom they were originally intended, namely, those women and men who have never had the benefit of schooling and who remain illiterate. However, the fact that such large proportions of already schooled people use the programs sends two signals. First, there clearly exists a strong demand among adults, especially women, for an education that is more than simply basic. Second, the government and interested agencies need to develop a framework for adult education that ranges from basic to lifelong learning. There are likely to be several options for acting appropriately on those signals.

Recommendation 3: The Ministry of Gender, Labour and Social Development, with the Ministry of Education and Sport, local governments, and interested agencies, should organize national discussions on establishing a system of adult education that will attract the truly nonliterate and also meet the demand for continuing education from those who have had some schooling and wish to make more progress. The discussions should consider the issue of formal qualifications and equivalence with the different levels of the school system. The ministry should also discuss how, while sustaining a particular concern for the education of women, society might attract nonliterate men to use the educational opportunities available to them.

Providing Agencies and Links to Income Generation

This study has shown that both the government and NGO programs are achieving similar levels of effectiveness, and that, even in districts where both are operating, demand is such that there is no risk of duplication or competition. On the contrary, there has already been some beneficial interaction between the government and NGO programs. Clearly, then, both the government and NGOs must continue to be directly involved in providing programs. At the moment, however, the two sets of programs operate separately from each other, and might benefit from closer interdependence.

Recommendation 4: The Ministry of Gender, Labour and Social Development should review experience in other countries and initiate discussions on ways of enabling the growing NGO sector to contribute even more to literacy education and lifelong learning.

Additionally, three observations point to possibilities for both widening and strengthening provision. The first observation is that, in some districts, literacy education was started with preexisting NGO groups and enhanced their usefulness to their members.[24] The second observation is that the only arm of government so far involved in FAL is the Department of

[24] This accords with the school of thought that suggests that learning literacy should come second to learning and practicing functions that actually require it.

Community Development. Yet other departments—for example, Health, Agriculture, Forestry—like the NGOs, also work with regular groups of people, many of whom might find literacy education useful. There could be possibilities for such departments to make literacy education part of their equipment for modernization. The third observation is that many learners join the programs in the hope of having access to a credit or small grant scheme, like *Entendikwa*, to help them work their way out of poverty. Many of the graduates had in fact tried to increase their incomes by diversifying the types of handicrafts in which they were engaged. Although literacy education can play only a supportive role in providing the knowledge, skills, and stimulus for learners to take advantage of available opportunities, linking groups of learners to microcredit schemes and the like could be strengthened.

Recommendation 5: The Ministry of Gender, Labour and Social Development should initiate discussions with appropriate ministries, departments, and other agencies that work directly with people in towns and villages about possibilities of their using FAL programs to reinforce their own effectiveness through enabling their own clients to acquire literacy and keeping literacy groups informed about the opportunities they offer.

Design and Methodology

The weaknesses observed in the literacy programs arise more from implementation than design. There is, accordingly, no need to change the broad strategy of the programs as recommended in the 1996 Plan, revised in 1998, although there are some modifications that ought to be considered. For example, although quantitative evidence is not available, observations of the WEP, SCF, and SOCADIDO programs seem to indicate that a judicious combination of REFLECT with other approaches might enhance effectiveness. The FAL programs have already adapted the use of PRA from REFLECT.

Recommendation 6: The Ministry of Gender, Labour and Social Development should promote further systematic experimentation with synthesizing approaches and methods in literacy education, and should arrange for the experiments to be properly evaluated.

Instructors/Facilitators

The instructors and facilitators are obviously the key to effective literacy education. Although this evaluation has suggested that their effectiveness does not depend on their educational qualifications, training, support, or payment, our conversations with FAL instructors warn that their current feelings of disadvantage vis-à-vis NGO facilitators threaten the sustainability of FAL programs. The 1995 Process Review has already recommended that a system of basic allowances and incentives for instructors should be worked out. The point gains in urgency if recommendation 2 above on a national system of continuous adult education is accepted, for then casual reliance on short-term volunteers would be unworkable.

At the same time, we recognize that two factors need to be taken into account. First, the government is at the moment not well placed to expand the public services, so that there is little possibility of forming cadres of professional adult educators entirely at public expense. Second, adult learners and their communities share in the responsibility for learning for their own development and should then help mobilize social energy for the purpose.

Recommendation 7: The Ministry of Gender, Labour and Social Development should initiate discussions with all interested parties on the options available within the country's culture for developing a framework of shared responsibility for creating, supporting, sustaining, and rewarding a national pool of locally based adult educators. The interested parties should include the existing public and private institutes, like IACE, Nsamizi, LABE, the RCU, and ULALA.

Literacy Materials and the Literacy Environment

While the distribution of learning materials is for the most part satisfactory, the quality of the primers is variable, with those in some languages being poor.

Recommendation 8: The FAL Coordinating Unit should undertake a careful review of all the primers and should investigate how best to involve local people, along with appropriate specialists, in their revision and enhancement.

Most graduates said that they had tried to read books or magazines but, because of to their scarcity, had succeeded only occasionally. The serious inadequacy of reading materials, both in the literacy programs and in the communities as a whole, raises the demand for multipronged initiatives to enrich the literacy environment. The production of low-cost reading materials, as is being done by the WEP and SCF programs, is therefore strongly to be commended.

Recommendation 9: The Ministry of Gender, Labour and Social Development should embark on an aggressive effort to produce and to encourage the production of simple booklets in local languages. It should mobilize various NGOs, such as churches and mosques, as well as graduate adult literacy learners, to generate manuscripts and to have them printed attractively in print large enough to be comfortable for new readers. It should also reactivate and support language committees to produce materials in the different languages, as has been started, for example, by the Lugbara and Madi Language Committee.

Practical Functional Skills and Income-Generating Activities

In applying the skills of literacy and in aspirations for further education, the evaluation found what appears to be an inconsistency. On the one hand, the graduates reported that their literacy skills were helpful in improving their productivity, yet, on the other hand, very few of them wished to use literacy to learn more about their occupations. It is possible that few of them associate education with the kinds of occupation that they follow. Intensifying and upgrading the occupational information in the primers and other instructional material may help make the link plainer. Since the majority of the beneficiaries of the literacy programs are rural based and engaged in agriculture, the focus should be on agricultural skills and other vocations commonly found in rural communities.

Recommendation 10: Primers and follow-up readers should continue to emphasize information on upgrading common rural occupations, so that learners more easily understand the link between literacy, continuing education, and their abilities to increase the productivity of their livelihoods.

Learner Involvement in Program Management

Our final recommendation concerns an aspect that our main text has not mentioned. In our visits to the subcounties, we came across instances where the learners had been associated with managing their programs. Although we collected no systematic data to support our impressions, these groups appeared livelier and more effective than average.

Recommendation 11: Possibly in collaboration with organizations like ULALA, the FAL programs should observe groups that have practiced forms of self-government with their learners and assess whether these experiences merit dissemination and wider adoption.

PART V: WIDER IMPLICATIONS

CHAPTER 10: THE UGANDA EVALUATION AND THE ADULT EDUCATION PROFESSION

John Oxenham

The evaluation reported in the previous chapters is a substantial addition to the literature on adult basic education in countries where large proportions of people have not been to school. The numbers of evaluations that have samples as large as those in Uganda, or as widely drawn, are few (see, for example Lind 1996, for Namibia; Indonesia Ministry of Education and Culture 1998, for Indonesia; Sandiford et al. 1995, for Nicaragua). Similarly, few have been able to use control groups of nonliterate adults and primary school pupils to assess the actual contributions of the education programs to knowledge, skills, and practice (see, for example Carron et al. 1989, on Kenya; Carr-Hill et al. 1991, on Tanzania;, Comings et al. 1997, on Nepal; Archer and Cottingham 1996, on Bangladesh, El Salvador, and Uganda; and Sandiford et al. 1995 for Nicaragua). The findings and implications of this evaluation are important for theory, policy, and practice in adult basic education. They demand assessment in the light of findings elsewhere. The purpose of this chapter, then, is to attempt that assessment.

The very first observation, to be discussed a little further below, is that some 200 to 300 hours of instruction by relatively untrained instructors can enable even older, wholly nonliterate adults to achieve levels of competence in reading, writing, and calculation that exceed those of children who have spent three or four years in primary schools. Whatever reflection that fact casts on the primary schools concerned, it strongly supports adult educators who argue that *the ability of adults to learn new skills persists well into middle age*.

An obvious signal that needs no assessment, but only careful and thorough noting, is the observation that the chief factor explaining the differences between the attainments in the 19 subcounties sampled is the *quality of the implementation of local programs*. It is true that the Uganda evaluation was wholly ex post facto, and so was not able to look at the actual detailed manner in which each local program was organized, administered, and supported, and then undertake systematic comparisons between them. Its observation is simply an inference by elimination after a regression analysis of several other factors. Nevertheless, it is echoed in the long and meticulous preparation and implementation of the more successful local campaigns of India's Total Literacy Mission (Expert Group 1994), and in the Ajmer experience (Mehta 1994), and reflected in the extraordinarily organized efforts of Cuba, Namibia, and Nicaragua.

A second obvious signal is that *programs run by governments can be as effective and possibly less expensive than those offered by other agencies*. It corroborates not only the experiences mentioned above, but also two programs supported by loans from the World Bank: the 20-year

I am indebted to Roy Carr-Hill, Jan Leno, Uta Papen, and Anna Pant-Robinson for comments and suggestions for improving the first draft of this chapter. Responsibility for any inaccuracies remains mine.

program run by the government of Indonesia (1977–99), and the eight-year program of the government of Ghana (1992–2000). This is not to argue in the least that governments should be the only agencies to undertake programs of adult basic education: the nongovernmental agencies in Uganda clearly deliver equally effective programs, albeit on necessarily more restricted scales. Similar examples could be drawn from many countries. Indeed, the potentially equal effectiveness of both government and nongovernment programs points the way to the positive partnership attempted by the government of India in 1978: it offered to help finance the programs of proven private bodies. That principle operates in the *faire faire* contractual partnership of the government and NGOs of Senegal, which the World Bank has supported since 1996. For policy, the strong signal is that frameworks to encourage *complementarity and active partnership between governments and other agencies* would best serve the people who want adult basic education.

That said, it may be as well to underline the value of the NGOs in taking initiatives in possibly neglected areas, exploring fresh approaches, and in sustaining public awareness and interest in adult basic education. Their role in Uganda has its counterparts elsewhere in the world, especially in India (Literacy House in Lucknow and the Bengal League of Social Services come to mind as prime examples), South Africa, and many countries of Latin America.

Also, it would be helpful to bear in mind experiences in Indonesia and Namibia. In Indonesia, the government agency was not actively eager to bring in NGOs as allies. On the other hand, in Namibia, it was the NGOs who seemed backward in accepting the government's invitation to help the national programs. Clearly, the history of relations between a government and the NGOs of a country will affect the possibilities and development of partnership between the two.

The chapter will now examine in turn the demand for school education and literacy in societies where schooling is not universal and where large sections of people continue to survive, if not thrive, without schooling or literacy. It will then look at the effectiveness of adults' efforts to educate themselves, as well as simultaneously to master the skills of reading, writing, and simple arithmetic.[25] It will also consider the uses that adults make of their new learning. Next, the discussion will move to issues of content: How important to the learners themselves is "functional" knowledge vis-à-vis the basic skills of literacy? In the light of the conclusions on content, the chapter will turn to discussing the import of pedagogical methods for effective learning. Finally, the chapter considers a practical issue: Do the experiences in Uganda have anything to say about the recruitment, training, technical support, and recognition of the people who undertake to instruct or facilitate classes in adult basic education?

The Demand for Education and Literacy

A striking finding in the Uganda programs of adult basic education is that no fewer than 73 percent of a randomized national sample of graduates from the programs had actually already had some primary schooling. Even more striking is that half of these schooled people had stayed in school between five and eight years. Further, although these people had graduated successfully from their literacy programs, they persisted for several months longer in attending more literacy

[25] The evaluation did not attempt to measure the efficiency of the programs in terms of the percentage of the enrollees who completed and graduated from their course. However, the figures in Table 4.7 suggest that, overall, some 72.8 percent of new enrollees may have passed the course, with variations from about 33.9 percent in Soroti to 99.2 percent in Iganga and even 109 percent in Hoima. Such proportions would be somewhat above the average of the efficiency ratios observed in other countries.

classes.[26] These facts have their counterparts in Indonesia and Namibia. The Indonesia Ministry of Education and Culture (1998) found that two-thirds of the sample in Indonesia had had two or more years of primary schooling, while Lind encountered a similar phenomenon in Namibia (1996). In Senegal, a pilot literacy programs, Projet Alphabétisation Priorité Femmes, found in its first year that nearly 10 percent of the enrollees had been to school. In its third year, that proportion had increased to 18 percent (Senegal 1999).

What these observations suggest is that people, who for some reason have interrupted their school education prematurely or have not been able to reach personal goals, use basic education programs as "second chances" and/or as a means of retaining and enhancing what skills and knowledge they have. On the one hand, such behavior confirms what is widely observed in many countries: that the more education a person has had, the greater her propensity to take up further educational opportunities. It is internationally well documented that the more literate persons/more educated persons are the ones who are most likely to make use of adult education opportunities—not those with little education to begin with (Belanger and Valdivielso 1997, Giere 1994, Rubenson 1994, OECD/Human Resources Development Canada 1997, p. 93).

On the other hand, it also prompts a question about the strength of demand from the totally unschooled and nonliterate population: Even where rates of adult illiteracy are 60 percent or more, would sufficient numbers of nonliterates on their own enroll to justify a program? Or would programs need proportions of the already schooled simply to make up numbers to satisfy criteria of viability? Alternatively, does the enrollment of people already with some schooling intimidate and deter many of the totally unschooled from enrolling, so that the main purpose of programs is largely frustrated? As these questions have been insufficiently researched, they cannot be answered yet.

However, it is possible that the demand from poor people with some schooling tends to cause literacy education programs to address their interests and to neglect the interests of even poorer people with no schooling at all. Where that possibility is strong, program designers would need to check whether special approaches might be needed to attract the really nonliterate and to overcome the factors that cause their diffidence about enrolling.

The main driver of demand seems uncomplicated: most of the people asked simply wanted to know how to read, write, and do arithmetic (see Table 7.9). In this they are not unique, for people in Indonesia, Namibia, Senegal, and elsewhere have given the same kind of answer. The observation suggests that, where schooling and literacy become more widespread, they acquire a value in themselves, separate from their potential uses. People who lack them feel at a disadvantage, even though they cannot articulate their practical uses. As for ambitions to pursue education beyond a mastery of the basic skills, the evidence is not conclusive. In Indonesia, they seemed to be modest, for relatively low proportions of learners tended to enter programs that led to formal certification. By contrast, in Namibia, the numbers enrolling in Stage Two far exceeded those passing the test for Stage One for the previous year, while the numbers enrolling in Stage Three between 1994 and 1999 exceeded those enrolling in Stage One three years earlier. The factors operating in the two situations are likely very different and need investigation.

However, the findings in Uganda do corroborate those in other multilingual countries, where only one or two official languages enable people to deal with official signs, documents, and

[26] It is probably prudent to note that the "staying on" seems to occur mainly among rural communities. Urban literacy classes apparently exhibit it less, but the Uganda study has no evidence on the point.

procedures, as well as facilitate access to waged and salaried employment. The high desire for instruction in English has its counterparts all over Africa and elsewhere.

The tentative policy signals from these observations seem to be three. First, where primary enrollment ratios are relatively low and the primary schools are both inefficient and ineffective, adult basic education programs should be designed to attract and accommodate both the totally unschooled and the insufficiently schooled. Second, although provision for certification and entry to courses of more scholastic education is probably desirable, as it confirms that basic education can open the way to higher things for the more ambitious, it need not be obligatory. Third, efforts to develop ways of combining basic literacy education in a vernacular language with simultaneous instruction in a desired official language should be encouraged and intensified.[27]

A final note: As elsewhere, Uganda's adult basic education programs attract poor people (see Chapter 4). In their role as instruments to help reduce poverty, they are self-targeting. In this aspect, they corroborate findings in virtually every country that organizes such programs.

The Effectiveness of Adults' Efforts to Educate Themselves, as Well as Simultaneously to Master the Skills of Reading, Writing, and Simple Arithmetic

Tables 6.5, 6.6, and 6.8 make it clear that, on all five tests of literacy and numeracy, even unschooled adults and those who, though partially schooled, could not previously write their names, mastered the skills involved to a greater degree than primary school pupils, who had completed three and even four years of schooling. Table 6.7 extends the point to include adults older than 50 years, whose average performance ranged between 7.3 and 39.0 percentage points above that of the Grade 4 primary pupils. Read with the estimates of cost in Chapter 8, these facts suggest that adults of all ages can learn the basic core skills better, in less time, at lower cost, and with less-trained instructors than can children. Put more provocatively, they suggest that, at least within the limits of simple reading, writing, and calculating, adult basic education programs are both more efficient and more effective than primary schools.[28] The observations in Uganda concord with findings in Nepal (Comings et al. 1997), where women who had completed nine months of basic education performed on a par with girls with up to five years of primary schooling, and in Indonesia (Indonesia Ministry of Education and Culture 1998).

That said, a word of caution is needed. Although the unschooled graduates coped well with the test of simple comprehension, they did not on average achieve satisfactory scores on more complex comprehension, numeracy, and writing. Clearly, 200 to 300 hours of adult basic education classes are sufficient for the average nonliterate adult to acquire rudimentary skills, but insufficient to assure mastery.[29] A second note of caution comes from Table 6.9: it suggests that continuing monotonically in a basic education class over several years does not automatically enable adult learners to enhance their skills. On the other hand, Tables 6.8 and 6.15 signal strongly that participation in primary school does correlate with improving skills. The inference

[27] It is beyond the scope of this chapter to describe, let alone advocate, any particular strategy or method for such efforts. Suffice it to remark that several options are conceivable, from including a minor "official" component in a vernacular program to offering a program wholly in an official language. The feasibility of any option would of course depend on the learners and the capacities of their instructors.

[28] This observation is no argument for substituting adult basic education for primary schooling. The primary school curriculum covers much more than most adult basic education programs attempt, while the "hidden curriculum" of disciplined, systematic, continuous, and long-term learning is quite possibly a major source of the social and economic benefits of schooling.

[29] The implications for primary schools are not the province of this chapter.

for policy in adult education may then be that, like the schools, adult basic education programs should plan ***multiyear, progressive, and cumulative curricula***—on the lines of Indonesia's Paket A, with its 100 booklets, followed by Paket B—that aim deliberately to hone the basic skills to higher and higher levels of mastery.

As noted in passing above, the Uganda findings corroborate the current view in adult education that age is not necessarily a barrier to successful learning. Although the youngest age group, 16–29 years, on average did best on all five tests, the 30–49 year group was not far behind, while the next gap to the average performance of the 50+ year group was wider, but not shocking. Adult basic education programs, then, can include all adults, younger and older: agencies offering the programs *need* ***not feel constrained to set arbitrary upper age limits*** on who may or may not participate in a program.[30]

Whether there should be ***lower age limits*** is an issue the evidence from Uganda cannot address. The programs in Uganda did not appear to encounter a phenomenon found, for example, in Bangladesh and Nepal, where classes intended for adults attract large enrollments from children, aged between 11 and 14 years, who have not been able to enter schools. This evaluation then cannot contribute to the discussion on how best to manage mixed groups of adults and preadolescents and whether there should be a lower age limit.

The Uganda findings show, along with work all over the world, that adults vary considerably in their capacities to master new skills and to absorb new information. Despite their "average" success, they signal once again the desirability of designing programs and instructional strategies that can accommodate such variability.

In terms of gaining new functional knowledge, forming new attitudes, and adopting new practices, the findings in Uganda, as in Indonesia, Bangladesh, El Salvador, Ghana, Kenya, Tanzania, and elsewhere, confirm that participants in basic education programs do compare favorably with nonparticipants. However, three points are salient. First, the differences between participants and nonparticipants are often not great (see Table 6.17). The possible reasons for this will be discussed below. Second, on some aspects, only minorities of the participants are able to show any learning (see Table 6.17 again). Third, acquiring new knowledge does not necessarily lead to developing new attitudes, and developing new attitudes does not necessarily lead to reformed behaviors (see Tables 6.19 and 6.21). In other words, programs of adult basic education can help people add to their information, but do not guarantee dramatic changes of attitude or behavior in all or even majorities of their participants. Nonetheless, information does, of course, at least carry the seeds of change.

Content: How Important to the Learners Themselves Is Functional Knowledge vis-à-vis the Basic Skills of Literacy?

Many, perhaps most, participants in adult basic education programs simply wish to feel able to read and write. On many points of information, the differences between participants and nonparticipants were not large. Taken together, do these two observations imply that much of the information that the programs offer is already known by the participants, just as it is known by their neighbors? Do they also imply that the information is not relevant to the effectiveness of the

[30] More serious constraints may arise from the norms of the local culture. In Uganda, as in Ghana, Namibia, and Nepal, older adults who want to learn how to read and write run the risk of ridicule from relatives, friends, and neighbors, as well as from politicians, who feel that investing in such people is a waste of resources.

program? In Nepal, Robinson-Pant's (1999) respondents said that, although they did know much of what the primers were telling them, they put up with it for the sake of the ability to read and write about it. Papen (forthcoming) found much the same in Namibia, with the additional reason that the course would enable the learners to go on to learning the official language, English. From another perspective, Mehta's (1994) astoundingly successful Total Literacy Campaign in the Ajmer district of Rajasthan used only primary school texts and materials to teach adults how to read and write, and apparently provided no "functional" information alongside. A much older instance occurred in Dezful, Iran, where the four most assiduous and successful learners in a class of farmers, were not farmers but municipal street cleaners. They mastered a curriculum with "irrelevant" information because it enabled them to achieve their goal of being certified literate.

Three questions arise from these observations. First, how important to participants is functional information in the context of learning the basic skills of literacy and numeracy? Adult educators have long argued that a main cause of the disappointing performance of literacy programs is their focus on the mechanics of literacy and neglect of what is interesting, useful, and immediately relevant to participants. This argument lay behind UNESCO's Work-Oriented Adult Literacy programs in 12 countries in the late 1960s and early 1970s, and also behind Freire's "reading the word to read the world," not to mention the several adaptations of Freire's ideas—the best known of which is the REFLECT approach developed by Action Aid. The Uganda evaluation, corroborated by the findings in Nepal and Namibia, suggests the possibility that the focus on the mechanics of literacy may after all be quite sound. The earlier disappointing performance of literacy programs may have stemmed from other factors.

However, a focus on the mechanics of literacy need not—indeed, should not—entail a regression to the methods of drills and rote exercises unrelated to daily experience. Between that tradition and the focus on functional skills is the third option, practiced most radically by REFLECT but present in other approaches also, of teaching literacy through its actual local applications. Examples are using signposts, official forms, personal letters, shop bills, and the like as materials that both teach and demonstrate the uses of literacy skills. It is as well to note here that many officially nonliterate people have in fact used local materials like labels and notices to teach themselves to read and write sufficiently for their own local purposes. The evaluation suggests that the Uganda programs, like perhaps most others, neither notice nor build on these attainments.

The second question is this: If functional information is not crucial to the participants, should curriculum designers spend time determining what information to impart and how best to impart it? Should they not instead focus on designing more engaging ways of enabling participants to master the mechanics?

However, if functional information remains important in the eyes of a program's sponsors and curriculum designers because of its potential contribution to education and development, and also because of its potential for heightening the interest, engagement, and effective learning of the participants, a third question arises. Adult educators have recognized for at least 50 years that adults already know a good deal, so that new learning should build on that, not repeat it. Yet the experiences cited suggest that curriculum designers still do not trouble to discover what the participants are likely to know already. Instead of adding to what the participants know, the designers needlessly repeat it. In doing so, they appear to risk the effectiveness of their own curricula through boring their participants. The third question is: Are adult educators slow learners? Or do the pressures to produce new curricula rapidly prevent them from taking their own advice?

How Important Is the Choice of Pedagogical Methods for Helping Adults to Learn Effectively?

Just as adult educators have advocated using content that is immediately relevant, interesting, and engaging for adult learners, so they have advocated instructional methods that are learner centered, participatory, and interactive. Because the Uganda evaluation was ex post facto, it was not able to assess the extent to which the programs of the government and other agencies observed these precepts, or to undertake assessments of comparative efficiency or effectiveness. It was able to attempt only a limited comparison of two forms of outcomes: test results between the government's FAL programs and Action Aid's REFLECT[31] and responses to questions on attitudes. Within those limits, the evaluation could not judge either program more effective than the other (see Tables 6.11–6.13).

Even if a comparative assessment had been possible, variations in the actual implementation of the prescribed methods may have complicated the issue. Informal observations suggest that not all instructors follow their training and lesson guides faithfully—REFLECT reported a particular deviation in El Salvador (Archer and Cottingham 1996), while Robinson-Pant (forthcoming) in Nepal and Papen (forthcoming) in Namibia noted that facilitators often modified their approaches "regressively." In part, the problem stems from the difficulties the instructors experience in handling "learner-centered" methods.[32] In part, it stems from the expectations of the learners themselves. That is to say, the participants seemed to expect to experience the routines, materials, processes, and authoritative handling that their children encountered in school and viewed them as the components of a proper education. Instructions in the facilitators' guides to stimulate and moderate discussions on particular issues were ignored. Even in REFLECT groups, some facilitators and participants expected some conventional texts and reading materials.

In a word, the evidence of the Uganda evaluation leaves open the question whether one teaching method is more effective overall than another, or whether one approach works better for certain learning objectives, while other objectives are more readily attained through other approaches. Perhaps what is more important is the commitment and skill of the instructor and the effectiveness of the training and support that s/he receives.

The evidence from Uganda also leaves unclear the issue of what is sometimes termed "post-literacy." Despite the lack of literature, credit schemes, and groups or cooperatives for various forms of development, a majority of the graduates sampled seemed not only to be making use of and maintaining their literacy skills, but also to be improving their incomes and standards of living, however modestly. If anything, the evidence would appear to support the view that the concepts of initial literacy followed by post literacy should give way to the concept of continuous, lifelong learning.

Facilitators/Instructors, Their Training and Recognition

The Uganda evaluation also leaves open questions about the facilitators themselves. It contrasts the facilitators in the government's program (FAL) with those engaged by other bodies. The FAL

[31] The major difference between the two programs is that the government's uses primers, while REFLECT in principle works with its participants to construct a customized curriculum out of their own local circumstances, living conditions, and environment.

[32] Arnove (1987) comments on the difficulty young *brigadistas* in Nicaragua had in trying to stimulate and moderate discussions on a number of topics. Kweka and Jeremiah-Namene (1999) note much the same in Namibia.

facilitators were all unpaid, if plaintive, volunteers—whereas the others received at least honoraria—and had had on average less schooling than the others, less initial training as facilitators, no refresher training at all, and very little supervisory support. Yet their learners did as well as those in the other programs on the tests of literacy skills and in responses to questions on functional information, attitudes, and practices. The uncertainty that this engenders about what might be the wisest policy for facilitators is reflected in the conflicting experiences elsewhere in the world.

In India, for instance, all the successful Total Literacy Campaigns relied on volunteer facilitators. In Bangladesh, Nijera Shikhi goes one step further: it requires its organizers to pay a small fee for the privilege of organizing classes, while it leaves rewarding the facilitators entirely to the learners themselves. In Ghana, the National Functional Literacy program calls for volunteers, but, in its first phases, promised outstanding ones special rewards in the form of bicycles and sewing machines. Indonesia rewarded its facilitators monetarily, but at such low rates as to be negligible proportions of the salaries of primary school teachers. Namibia, on the other hand, contracts its facilitators as part-time employees on annual engagements, and calibrates their pay proportionately with the salaries of primary school teachers, while Senegal has institutionalized honoraria for the facilitators by building them into its contracts with non-profit educational organizations. In between the volunteers and paid employees are the instructors of Nepal, who are paid by results, that is, the numbers of learners who pass the graduating test.

All the programs mentioned can claim good rates of efficiency and effectiveness. Drawing any decided inference for policy is therefore risky. What might be hypothesized is as follows: For short-term campaigns, where relatively large numbers of schooled people can be mobilized as temporary facilitators/instructors, relying on volunteers and moral rewards is probably feasible. The willingness of the Uganda volunteers, combined with their hopes of material reward in the longer term, seems to support this view. However, the widening recognition that lifelong learning is growing ever more necessary to sustain development calls the usefulness of short-term campaigns into question. Frameworks of continuing education require some provision for more- rather than less-trained educators. How incentives and rewards for such educators should be fashioned and calibrated might depend on three factors: one is the acceptance by the adult population of the need to continue learning, along with the willingness to contribute toward the costs of organizing the opportunities; the second is the prevailing willingness of people to give time at concessionary rates of reward to helping their neighbors, sometimes called social energy; while the third, perhaps most important, is the intensity and endurance of the commitment that local and national leaders are prepared to devote to supporting programs of adult basic education.

Summary of Signals

In summary, the Uganda evaluation has confirmed much of the evidence from elsewhere in the world. It has also left some questions open.

The questions left ***open*** are(1) the treatment of the facilitators; (2) the balance to be held between four elements in programs of adult basic education: the basic skills of literacy and numeracy, functional information proffered by the sponsors, contextual information drawn from local situations, and the promotion of awareness and empowerment; (3) the relative efficacy of the various pedagogical methods on offer; and (4) the strength of demand for education and literacy among the wholly unschooled and illiterate adult population.

The signals that the evidence from Uganda tends to ***confirm*** are:

- The central importance of careful preparation and sound implementation
- The desirability of positive, complementary partnerships between governments and other concerned bodies
- The self-targeting nature of adult basic education as an instrument to help poor people
- The desirability of accommodating two streams of demand for adult basic education: from the wholly unschooled and from the partially schooled
- The ability of adults of all ages to learn the basic skills of reading, writing, and calculating at more rapid rates than primary school children; conversely, the desirability of leaving enrollment open to all comers, irrespective of age
- The variability in the capacities of people to master skills and knowledge and the need to accommodate it
- The need for a longer view of literacy education as part of a progressive and cumulative process to enable the "average" adult to attain adequate mastery of the basic skills and to continue learning how to apply them productively
- The challenge to develop ways of combining basic education in a vernacular with an introduction to an official language that makes it easier to deal with the wider society.

BIBLIOGRAPHY AND REFERENCES

Ablo, Emmanuel, and R Reinikka. 1998. *Do Budgets Really Matter? Evidence from Public Spending on Education and Health in Uganda.* World Bank Policy Research Working Paper No. 1926.Washington, D.C.:

Archer, D., and S. Cottingham. 1996. *Regenerated Freirean Literacy through Empowering Community Techniques.* London: Action Aid.

Arnove, R. F. 1987. "The 1980 Nicaraguan National Literacy Crusade." In R. F. Arnove and H. J. Graff, eds., *National Literacy Campaigns: Historical and Comparative Perspectives.* New York: Plenum Press.

Baryayebwa, Herbert, et al. 1997. *A Report on Community Consultation Exercise for Functional Adult Literacy Programs in Kumi and Soroti District.* Kampala: United Nations Development Programme and Ministry of Gender and Community Development.

Belanger, Paul, and Sofia Valdivielso, eds. 1997. *The Emergence of Learning Societies: Who Participates in Adult Learning?* New York: Pergamon.

Bell, C. V. R. 1985. *Education in Uganda.* Oxford Development Records Project Research Report 11. Processed.

Bown, Lalage, and G. W. W. Mayatsa. 1998. *Training for Literacy Choices: A Mid-Term Review and Evaluation of the Work of LABE (Uganda) in Training, of Literacy Trainers, Women's Literacy and Continuing Literacy Support.* Kampala: World University Service (U.K.) and LABE (Uganda).

Carr-Hill, Roy A., Aikael N. Kweka, Mary Rusimbi, and Rustica Chengelele. 1991. *The Functioning and Effects of the Tanzanian Literacy Programs.* Paris: International Institute for Educational Planning (IIEP).

Carron, Gabriel, K. Mwiria, and G. Righa. 1989. *The Functioning and Effects of the Kenya Literacy Programs.* Paris: International Institute for Education Planning (IIEP).

Carter, F. 1967. "Education in Uganda 1894–1945." Ph.D. diss., University of London

Cawthera, A. 1997. "Let's Teach Ourselves: The Operation and Effectiveness of a People's Literacy Movement." Master's thesis. Center for Adult and Higher Education, University of Manchester

Comings, J. P., C. Smith, S. LeVine, A. J. Dowd, and B. Garner. 1997. "A Comparison of Impact from Schooling and Participation in an Adult Literacy Program among Women in Nepal." National Center for the Study of Adult Learning and Literacy, Harvard University, Cambridge, Mass. Processed.

Cottingham, Sara; T. Kakooza, D. K. Obbo, P. Birungi, T. Balemesa, and R. Hampel. 1995. *A Process Review of Functional Literacy Projects in Uganda.* Kampala: Ministry of Gender and Community Development.

Department of Adult Education and Communication Studies, Makerere University. 1999. "Technical Proposal for Consultancy Services for Evaluation of the Functional Adult Literacy Programs." Processed.

Draper, A. James. 1998. *Africa: Adult Education.* South Africa: CACE Publications, University of the West Cape.

Expert Group. 1994. *Report of the Expert Group on the Total Literacy Campaign and National Literacy Mission.* New Delhi: Ministry of Human Resource Development.

Furley, O. 1988. "Education in Post-Independence Uganda: Change amidst Strife." In M. Twaddle and H. B. Hansen, eds., *Uganda Now: Between Decay and Development.* London: James Currey.

Garvey, Brian. 1996. "Education and the State in Uganda." *Journal of Educational Administration and History* 8(162).

Giere, U. 1994. "Adult Education Policy between Utopia and Fatalism: A Review Essay of Policy-Related Literature." *Policy Studies Review* 13(3/4):433–42.

Government of Uganda. 1996. "The Empowerment through Functional Literacy and Education of the Girl-Child." *Report of the African Conference on the Empowerment through Functional Literacy and Education of the Girl-Child, 8–13 September, 1996: Declaration and Framework for Action.* Kampala.

Government of Uganda and UNICEF. 1995. "Master Plan of Operations with Programs Plans of Operations. Country Programs 1995–2000." Kampala.

Iganga District Local Government. 1998. "District Population Profile and Action Plan." District Planning Unit, Iganga District Administration.

Indonesia Ministry of Education and Culture. 1998. "Impact Evaluation of Non Formal Education Program in Batch I and II Intensive Kecamatan, Final Report." Jakarta: Directorate General of Out-of-School Education, Youth and Sports, Directorate of Community Education.

International Institute for Educational Planning. 1999. "The Kenya Literacy Programs: A View from Below." Report for International Workshop on the Effects of Literacy, Nairobi, Kenya, November 26–29, 1998. Paris: IIEP

Kater, A., V. Mlekwa, M. Keregero, P. A. K. Mushi, and P. K. Nyasugara. 1994. *Peasants and Educators. A Study of the Literacy Environment in Rural Tanzania.* SIDA Education Division Documents No. 62. Stockholm.

Kweka, E. A, A. B. S. Singo, and N. Goday. 1982. *Ripoti ya Utafiti Kuhusu Taathira za Kisomo Chenye Manufaa Tanzania.* Dar es Salaam: Wizara Ya Elimu, Elimu ya watu wazima (Ministry of Education, Department of Adult Education).

Kweka, A. N., and Jeremiah-Namene. 1999. "Second Overall Evaluation of the National Literacy Programs in Namibia." Windhoek: Ministry of Basic Education and Culture.

Kwesiga J. B. 1994. "Literacy and Language Question: Brief Experiences from Uganda." Unpublished conference paper. DENIVA, Kampala.

Lasway, R., A. Muro, D. Nyakirgang'ani, P. Mbuguni, and R. Meena. 1987. "Report on the Evaluation of the New Adult Education Curriculum from the Point of View of its Relevance to and Impact on Women." Dar es Salaam: Ministry of Education and SIDA.

Lind, A. 1996. "Free to Speak Up, Overall Evaluation of the National Literacy Programs in Namibia." Windhoek: Directorate of Adult Basic Education, Ministry of Basic Education and Culture.

Mehta, A. 1994. "Draft Report on the 1991–1993 Total Literacy Campaign in the Ajmer District of Rajasthan, India." Processed.

Ministry of Gender and Community Development, Uganda. 1997. "Report on the (1997) Annual Review of the Functional Adult Literacy Programs." Kampala:

———. 1996a. "National Plan for Functional Literacy." Kampala.

———. 1996b. "Functional Adult Literacy Curriculum." Kampala.

———. 1996c. "Report on the Workshop to Review the Functional Adult Literacy Process." Kampala.

Ministry of Local Government. 1989. "The National Seminar on the National Integrated Plan for Eradication of Illiteracy in Uganda." Kampala: Ministry of Education with the assistance of UNESCO/BREDA.

———. 1987. "National Operational Seminar for Literacy Leaders." Kampala: Ministry of Local Government and UNESCO.

Okech, Anthony, Roy A. Carr-Hill, Anne R Katahoire, Teresa Kakooza, and Alice N. Ndidde. 1999. "Report of Evaluation of the Functional Adult Literacy Programs in Uganda." Kampala: Ministry of Gender, Labour and Social Development in collaboration with the World Bank.

Okech, Anthony. 1994. Innovative Approaches to Adult Literacy/Education Currently Used in Uganda." Kampala: SNV/the Netherlands Development Organisation.

Organisation for Economic Co-operation and Development/Human Resources Development Canada. 1997. *Literacy Skills for the Knowledge Society. Further Results from the International Literacy Survey*. Paris: OECD/Canada: Minister of Industry/Human Resources Development.

Papen, U. (forthcoming) *The Effects of Namibia's National Literacy Programme, 1992–2000.* London: King's College, University of London.

Republic of Kenya, Central Bureau of Statistics. 1982. "Results of Rural Literacy Survey." *Social Perspectives* 7(1) (December). Nairobi: Ministry of Economic Planning and Development.

Robinson-Pant, Anna. (forthcoming) *Why Eat Green Cucumbers in a Time of Dying.* London: University of London, Kings College.

Rogers, Alan. 1993. "The World Crisis in Adult Education: A Case Study from Literacy." *Education for Development* 23(2).

Rubenson, K., 1994. "Adult Education Policy in Sweden, 1967–1991." *Policy Studies Review* 13(3 /4):367–90.

Sandiford, P., J. Cassel, M. Montenegro, and G. Sanchez. 1995. "The Impact of Women's Literacy on Child Health and Its Interaction with Access to Health Services." *Population Studies* 49(1) (March).

Save the Children (U.K.). 1997. "West Nile. Needs Assessment Survey of Female Literacy Programs."

Senegal. 1999. "Rapport d'évaluation." Dakar: Cabinet du Ministre Délegué Chargé de l'Education de Base et des Langues Nationales.

UNESCO. 1994. *APPEAL Manual for Planning and Management of Literacy and Continuing Education.* Vol. III: *Management of Literacy and Continuing Education*. Bangkok: UNESCO Principal Regional Office for Asia and the Pacific.

UNESCO. (1994*) APPEAL Manual for Planning and Management of Literacy and Continuing Education.* Vol. IV: *Monitoring and Evaluation of Literacy and Continuing Education.* Bangkok: UNESCO Principal Regional Office for Asia and the Pacific.

Wagner, Daniel. 1995. "Literacy and Development: Rationales, Myths, Innovations, and Future Directions." *International Journal of Educational Development* 15(4):341–62.

Wekiya, Irene. 1999. "Women Empowerment Programme—Arua." West-Nile, Arua.

Women's Empowerment Programme. 1998. "Functional Literacy for Women's Empowerment." West-Nile, Arua.

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The World Bank has traditionally shied away from adult education adult literacy programs in the last two decades because research evidence of their effectiveness has been incomplete. Instead, it has focused on supporting universal primary education (UPE) as the most effective long-term approach to eliminating illiteracy. But progress toward UPE in Sub-Saharan Africa has been disappointingly slow. Because the Bank is convinced that basic adult literacy, especially among women, plays a pivotal role in promoting social and economic development, it is exploring effective ways to support adult education programs while it maintains its strong support of primary education.

Adult Literacy Programs in Uganda is one result of this effort to examine adult education programs. The study, initiated by the Government of Uganda's request for assistance in conducting a countrywide evaluation of its adult literacy programs, suggests that the track record of such programs is not so poor as often thought and that government-run programs may be as effective as those operated by nongovernmental agencies. The finding that most adult students in these programs had already had some primary schooling and were trying to upgrade their skills and knowledge is evidence of a large unsatisfied demand among Ugandan adults for more education.

The first of several Bank publications on adult education, this book presents the findings from Uganda, compares them with what was learned from other parts of the world, and explores their implications for educators, policymakers, and others in developing countries. The authors hope the book will contribute to improved Ugandan literacy programs and also help to clarify the role that literacy programs can play in other countries.

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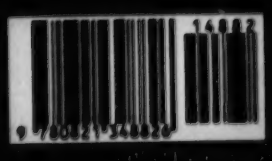

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